

Volume X.

CHICAGO, ILL, JULY 22, 1910.

CAROLINA PORTLAND CEMENT COMPANY

We are the largest distributers of Portland Cement, Lime Plaster, Fire-brick and General Building Material in the Southern States, and have stocks of Standard Brands at all of the Atlantic and Gulf Seaports, and at our interior mills and warehouses, for prompt and economical distribution to all Southern territory. Write for our delivered prices anywhere, Also Southern agents for the "Dehydratine's" waterproofing material. "Universal," "Acme" and "Electroid" Brands Ready Roofing.

Charleston, S. C.

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Atlanta, Ga.

New Orleans, La



UNION MINING COMPANY

GOVERNMENT STANDARD

DEVOTE a special department to the manufacture of Erick particularly adapted both physically and chemically to

Lime Kiln and Cement Kiln Construction

Large stock carried. Prompt shipments made. Write for quotations on Standard and Special shapes, to

UNION MINING CO., Mount Savage, Md.

CAPACITY, 60,000 PER DAY. ESTABLISHED 1841.

SPECIAL FEATURES IN THIS NUMBER

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Phoenix Portland Cement ALL USIES.

PHOENIX PORTLAND CEMENT CO.

NAZARETH, PA.
Sole Selling Agent, WILLIAM G. HARTRANFT CEMENT CO.
Real Estate Trust Building, PHILADELPHIA, PENNSYLVANIA.

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Is used for sawing stone in more than a dozen states. Cuts more and lasts longer than any other sand on the market. Unexcelled for Roofing, Facing Cement Blocks, White Plaster, etc. Freight rates and prices on application.

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BALL MILLS

Branches:

BELTING CHICAGO PURE OAK TANNED LEATHER BELTING

Send for Our Illustrated Catalog

111 North Green St. CHICAGO

NEW YORK PHILADELPHIA NEW ORLEANS

DAMP **PLACES** PORTLAND, OREGON

FOR



YOUR CHANCE!!! THIS FRONT SEAT FOR SALE.

An opportunity to secure this space will not occur again in years.

"The Standard of Quality

You know what the linings for your cement and lime kilns cost per thousand brick but do you know how much per ton output?

That s the cost that is vital, that's why we are anxious you should know. Write us.

HARBISON - WALKER REFRACTORIES PITTSBURGH, PENNA.

HIGHEST GRADE PORTLAND CEMENT MANUFACTURED



1,000,000 BARRELS YEARLY



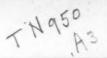
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IN ALL KINDS OF CONCRETE WORK

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The Ironton Portland Cement Co.

Manufacturers of the

Celebrated Limestone Brand of Portland Cement

Used by the Railroads in Kentucky, Ohio, West Virginia, and Virginia during the past five years. Cement as finely ground as any on the market. Guaranteed to pass all the standard specifica-

Plant located at Ironton, O., within easy access to seven States, namely, Ohio, Indiana, Kentucky, West Virginia, Virginia, Tennessee and North Carolina.

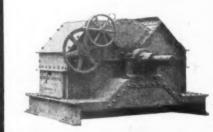
Shipments via the N. & W. Ry., C. & O. Ry., C. H. & D. Ry., D. T. & I. Ry., or Ohio River.

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The Ironton Portland Cement Co.

Ironton, Ohio

"PENNSYLVANIA" HAMMER CRUSHERS



For Pulverizing Limestone, Lime, Cement Rock, Marl, Shale, Etc.

Main frame of Steel; "Ball and Socket" Self-aligning Bearings; forged Steel Shaft; Steel Wear Liners; Cage adjustable by hand wheel while Crusher is running. No other Hammer Crusher has such a big Safety Factor.

PENNSYLVANIA CRUSHER CO.
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New York Pittsburgh

GRAVEL WASHING PLANTS



Stone Crushing Cement and Power Plants

J. C. Buckbee Company, Engineers, CHICAGO

"LEHIGH" PORTLAND CEMENT



Write for Catalogue

High Tensile Strength, Finely Ground Light and Uniform in Color. Manufactured by the

Lehigh Portland Cement Co.

ALLENTOWN, PA

Western Office: 725 Rockefeller Bldg., CLEVELAND, OHIO

Capacity, 8,000,000 Yearly.

CHICAGO A

"THE BEST THAT CAN BE MADE"

"Chicago AA" Portland Cement is best adapted for use in making concrete because of its absolute uniformity, fineness, prompt hardening and attractive color. "Chicago AA" is second to none, and every barrel is fully guaranteed to meet the requirements of the Standard Specifications.

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Booklets on Request.

Chicago, Ill.



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ONE GRADE-ONE BRAND

Best in the World for Sidewalks

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Washed White Silica Sand

Unexcelled For Concrete and Plaster Finishes
Ornamental Concrete Stone—Exterior Plastering
Roofing—Sawing Stone and Marble, Etc.
Freight Rates and Prices on Application.

E. J. REYNOLDS and COMPANY UTICA, ILL.

TWENTY LONG YEARS

of time and weather tried out Ricketson famous "Red Brick" Brand.

COLOR

for Mortor, Brick, Cement, Stone, etc., and proved it to be absolutely permanent. Red, Brown, Buff, Purple and Black.

Ricketson Mineral Paint Works



Volume X

CHICAGO, ILL, JULY 22, 1910

Number 1

Great Plaster Center Fort Dodge as a

Natural Advantages Have Made this Thriving Iowa City One of Vast Importance in the Trade— Something About the Plants in Operation There.

Ft. Dodge, Ia., July 8.—Natural advantages have made Ft. Dodge one of, if not the largest center for manufacturing plaster in the country. A strip of land about four miles distant southeast of its business center, five miles long and varying in width from one-quarter to one mile, contains rich deposits of gypsum rock and clay, believed to be practically inexhaustible. No other deposits of gypsum rock have been found in the state of Iowa. When first discovered, gypsum rock in this strip of land was quarried, but it was found shortly after that better material could be secured by mining, and consequently shafts since then have been sunk to a depth of sixty feet and tunnels run to the heart of the gypsum deposits.

to a depth of sixty feet and tunnels run to the heart of the gypsum deposits.

The first two plaster mills here were put up and operated in 1873, owned by the Iowa Plaster Association, and the third mill was erected by John F. Duncombe in 1880. The first two mills were torn down years ago and the other burned down in 1908. What is known as the Blandon mill, owned by the S. Gypsum Company, is the oldest now in operation.

There are five companies in Ft. Dodge operating mills manufacturing plaster. Their equipment is of the best, modern and up-to-date. The total output is approximately 1,000 tons per day, which is shipped to towns throughout this state, Illinois, Missouri, Indiana, Michigan, Minnesota, Wisconsin, Nebraska, North and South Dakota and to the Pacific coast. The product consists of cement plaster, wood fibre plaster, stucco, plaster paris, dental and land plaster. It is also made up into plaster board, studding and gypsum partition blocks, all used for fireproof partitions. The bulk of the tonnage of this city is wall plaster, although crushed and ground gypsum used in the manufacture of Portland cement, forms no inconsiderable part of the total shipments made.

The U. S. Gypsum Company owns about 1,200

The U. S. Gypsum Company owns about 1,200 acres of gypsum land, including 160 acres of ground where their Mineral City mill is located. The U. S. Gypsum Company is erecting within 200 feet of the old mill a new one, of even larger capacity, the steel frame of which is now up, and it is expected that it will be finished and in operation by fall. The equipment of their present mills consists each of four kettles, a dryer, emery burrs, mixer hin and other necessary and complicated modern machinery. The Plymouth Gypsum Company's mill stands in seventy-five acres of ground, two miles from the business center. This company owns 300 acres of gypsum land. The equipment of its mill is four kettles and a dryer, or equal to five kettles. The gypsum rock which is received from its mine, a mile or more distant, is run through a crasher at the mill and elevated to a dryer. After going through the dryer it is taken to a pulverizer. From

there it goes to the kettles, where the material is calcined. Leaving the kettles, it is elevated again and run through rock emery burrs and reground. Then it is taken to the mixer bins and the various plastering materials prepared for the market. This method and process is practically the same, with some slight variation, in all the mills in Ft. Dodge.

The Plymouth Gypsum Company built and completed an aerial tramway from its mill to the mouth of the mine from which the gypsum rock is taken. It saves much time and labor in handling the tons of rock and clay required for the mill daily, and annihilates the distance. It is a new

style of tramway, running on two cables instead of one. The cables are stretched on poles 100 feet apart. The cars run on two cables the same as cars on rails; are loaded and unloaded automatically. The tramway starts at the loading end of the mine, a mile and a half distant from the mill, rising gradually to a height of fifty-five feet as it crosses the Des Moines river, and gradually falls from this point to the mill, where the cars automatically dump the rock. The span across the river is 669 feet long from point to point, and was an engineering feat of no mean skill. To be (Continued on page 32.)

(Continued on page 32.)



STYLE AERIAL TRAMWAY, 9,600 FEET IN LENGTH EXTENDING FROM THE GYPSUM MINE TO THE MILL OF THE PLYMOUTH GYPSUM COMPANY AT FT. DODGE, IOWA.

JUL

Power & Mining Machinery Co.

MILWAUKEE, WIS. U. S. A.

District Offices:

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New York City

Atlanta

El Paso

San Francisco

"Half the size,
Half the weight;
Half the height,
Half the freight."

TO WHICH MIGHT ALSO BE ADDED:

"Half the efficiency, Half the life; Half the success, Double the strife."

All the above at the same price of a real crusher, too, such as the

"McCULLY CRUSHER"



McCULLY CRUSHERS ARE NOT SOLD BY RHYME BUT BY REASON

By reason of their unequaled capacity and wearing qualities on rock and ore of any degree of hardness, and WITHOUT MELTING ANY BABBITT.

By reason of not requiring pumps for circulating the oil.

By reason of not requiring any cooling system for cooling the oil.

By reason of their unequaled efficiency under any and all conditions of service.

By reason of their unequated economy due to minimum power, oil and repairs required.

By reason of many other "reasons",—too numerous to mention here, but which are contained in our new Catalog No. 4-R which is just off the press.

DO YOU WANT IT? THEN SEND FOR IT. IT'S FREE!

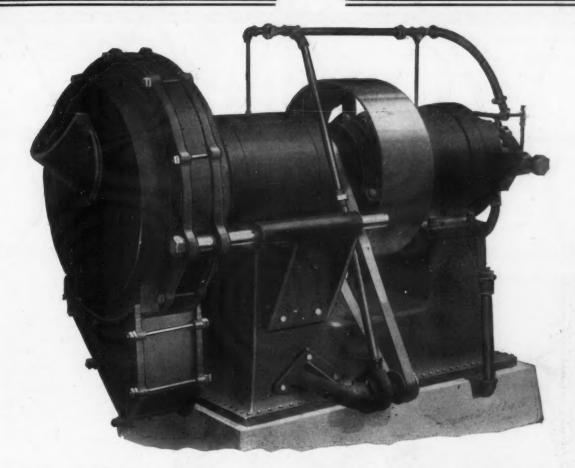
Principal Products

ROCK CRUSHING MACHINERY MINING AND SMELTING MACHINERY
CEMENT-MAKING MACHINERY

WOOD IMPREGNATING PLANTS POWER TRANSMITTING MACHINERY
LOOMIS-PETTIBONE GAS GENERATORS
SUCTION GAS PRODUCERS

Write for Catalogs on any of Above, Mentioning this Journal.

EVERY TIME!



The SYMONS DISC CRUSHER is an "Easy Winner" on the following points:

- 1. In making any size of product desired from 3 inch to 3-16 inch.
- 2. In the easy method of changing the size of product.
- 3. In great capacity.
- 4. In provision for taking up wear.
- 5. In durability and low repair cost.

- 6. In simplicity.
- 7. In operation on wet or sticky material without slippage or choking.
- 8. In easy regulation of the crushing stroke to suit any stone or ore.
- 9. IN SATISFACTION TO THE CUSTOMER.

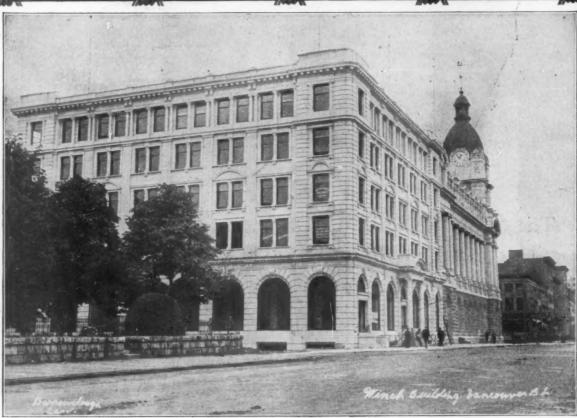
The conclusive argument is made by the machine itself. We will send it to you on 20 days trial, allowing you to return the crusher to us, if for ANY reason you are not entirely satisfied.

Symons Brothers

605 Majestic Bldg.

MILWAUKEE, WIS.

JUL



United States Steel Products Export Co., New York., N. Y., Export Representatives

First Annual New York Cement Show



Madison Square Garden December 14-20, 1910

Fourth Annual



Chicago Cement Show

Coliseum February 17-23, 1911

THE Seventh Annual Convention of the National Association of Cement Users and the Annual Convention of the Association of American Portland Cement Manufacturers will be held in New York during the period of the Cement Show.

For information about either the New York or Chicago show address the

Cement Products Exhibition Company
115 Adams Street :: :: Chicago

THE QUALITY THAT NEVER FAILS

Trinity Portland Cement

Your Cement needs can be supplied efficiently. Daily capacity, 4000 barrels. Write to-day.

Southwestern States Portland Cement Company

GENERAL SALES OFFICE: 611 WILSON BUILDING

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"WOLVERINE"

The Alright Cement

MADE RIGHT SOLD RIGHT WORKS RIGHT WEARS RIGHT

The Best Is None Too Good For You.
Insist Upon

WOLVERINE PORTLAND CEMENT COMPANY

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"THE BEST IS NONE TOO GOOD"

HIGHEST GRADE of

Every Barrel Absolutely Uniform.

R. R. facilities especially adapted for prompt shipments in the northwest.

Capacity 1,500,000 bbls. Yearly.

ESTERN STATES PORTLAND CEMENT COMPANY

MASON CITY, IOWA



BAY STATE

Brick and

Cement

Use the

Coating

to Protect

Concrete

Against the

Ravages of

Dampness



HIS coating becomes a part of the material itself and will give concrete, stucco, brick or plaster any shade desired as well as protect it against moisture.

It does not destroy the desirable distinctive texture of concrete.

It can be used as a floor coating on cement floors, on the exterior of mills and factories; on the interior of subways or cellars, where dampness would pre-

clude other paint; on public or private buildings of every description.

It will not chip or flake off and thus is a perfect coating or tint for use in factories where delicate machinery is used.

Its durability and fire retarding qualities make it particularly desirable not alone on stucco, concrete or plaster, but also on wooden partitions.

It comes in many beautiful shades ranging from pure white to dark green. It gives a dull finish and is more economical than lead and oil or cold water paints.

Ask your dealer for it or address

for catalogue.

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Paint and Varnish Makers and Lead Corroders

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Ceresit means 16 years' experience in waterproofing research. Ceresit Paste is added to the water used in mixing mortar or concrete. With the water the Ceresit Paste penetrates to all parts of the concrete or mortar.

Ceresit is now being used for the Harper Memorial Library (Chicago University) which is more than an ordinary waterproofing job. There is a reason why Ceresit is so widely known all over the world. Insist upon Ceresit being specified for your next building.

ASK FOR OUR FREE BOOKLET, SPECIFICATION, ETC.

CERESIT WATERPROOFING COMPANY

1307 Flat Iron Building NEW YORK, N. Y.

GENERAL OFFICES: Commercial National Bank Building CHICAGO, ILL.

1218 Chestnut Street PHILADELPHIA, PA.

Hydrated Lime

Bulletin No. 35

The many merits that Hydrated Lime possesses over common or lump lime are almost too numerous to mention. There is not an architect, mason, contractor, dealer, corporation or builder in all this broad land of ours, that is up-to-date, but acknowledges the Superiority of Hydrated Lime. This now is an accepted fact. It is being used universally and the Demand has correspondingly increased, and is increasing every day, to such immense proportions that it is incomprehensible that the right and Only Guaranteed Process is not adopted by all.

The Kritzer Way is the Right Way

The Kritzer Hydrating Process has Always been Successful. We have expert engineers, and practical men to design, build, and equip a complete Hydrating plant for you—exactly suited to all conditions and needs of your locality.

We absolutely Guarantee not only this but that we will build the best Hydrating Plant ever erected,—one that will

Produce the Best Results, Most Economically.

To continue year after year burning lime and selling it on a small margin of profit is a

Poor Business Policy

Architects and Owners, Masons and Contractors everywhere are demanding Hydrated Lime because of its proven and acknowledged superiority. The Dealers are anxious to handle it, not only because of the Better Profits that accrue to them but also owing to the many other great advantages that this commodity gives them.

Now is the time for You to Get Busy

For full particulars on the "Only Guaranteed Successful Process," write

The Kritzer Company 115 Adams Street, - CHICAGO, ILLINOIS

JUL

Below is given a letter received from C. W. S. Cobb President of the Glencoe Lime and Cement Co. of St. Louis, Mo. endorsing the Gas Producer Plant recently installed for his company.

Glencoe Lime and Cement Co.

St. Louis, May 2, 1910.

Mr. E. Schmatolla,

150 Nassau St.,

New York City.

My dear sir:

We confirm herewith that you left our new lime kiln and gas producer which you designed and lighted for us in good working condition. The Producer gives plenty of gas on natural draft even with an inferior (slack) coal which we have to use in consequence of the miners' strike. Thus far the coal consumption and output under adverse conditions are satisfactory, and we are greatly pleased with the simple and easy manner in which the kiln can be worked.

After our men become more familiar with the system, and a few details are worked out, we expect still better results than you have promised. The quality of the lime made by this gas system is entirely satisfactory.

I am,

I am, Yours very truly, (Signed) C. W. S. COBB, President.

ERNEST SCHMATOLLA CONSULTING ENGINEER

150 Nassau Street, New York City

Branch Offices in London and Berlin

Specialist in designing, constructing and operating Gas Producers, Furnaces and Kilns for Rock Products, Chemical and Metallurgical purposes.

Longest experience and greatest success in PRODUCER GAS FIRED SHAFT KILNS for burning lime, dolomite and magnesite.

Many of these kilns, with daily outputs ranging from one to fifty tons per day, have been built in Germany, Austria, England, Russia and other European countries, also in America, Africa and Australia. Greatest economy in fuel and labor; very simple in operation, high class product, natural draft, all kinds of fuel, hard and soft coal, lignite, peat, wood and wood refuse. Best references.

The Bradley Producer

Gas Process for Burning Lime.

Four and three quarter pounds of lime to one pound of coal on a large output is now being secured every day.

Does that look like economy to you?

=RESULTS GUARANTEED=

Duff Patents Company Frick Building Pittsburg, Pa.



Limestone and Shale

FOR MANUFACTURE OF

Portland Cement

ON THE

Illinois Central Railroad

THE

WEST AND SOUTH

Coal, Water and Good Labor

For Full Particulars Address

J. C. CLAIR, Industrial Commissioner

I. C. R. R. CO. :

No. I PARK ROW, CHICAGO

Mr. Lime Manufacturer:

■ Do you know that every lime plant that employs the BATES SYSTEM of bagging their lime is doing it at a LESS COST than you do if you do not employ that SYSTEM? IT'S A FACT. © Our lime, cement and plaster sacks are giving universal satisfaction. We GUARANTEE the quality.

The Urschel-Bates Valve Bag Co. TOLEDO, OHIO

JUL

MONARCH HYDRATED

Cheaper and Better than LUMP LIME



Its value to you is greater because

- -It costs less to handle-
- -It can be thoroughly soaked in 24 hours-
- -No screening required-
- -Carries more sand-
- -Gauges with a third less plaster-
- -Spreads further
- -Easier-
- -Will not air slack-

You will be a MONARCH MAN if you once try MONARCH HYDRATED LIME.

Our prices satisfies. Write us. "We ship sudden"

The National Lime & Stone Co.

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MITCHELL LIME

Is Chemically Pure and Practically Free from Waste

The Strongest White Lime on the Market. Used and recommended by Sand-Lime Brick Manufacturers, Chemists, Soap and Glue Works. Plasterers and Masons.

Prices Cheerfully Submitted

Mitchell Lime Company

MITCHELL, INDIANA

Lump - Barreled - Hydrated - Ground STRONGEST IN OHIO.

We are not connected with any Trust or Combination.

WRITE US PHONE US The Scioto Lime and Stone Company, Delaware, Ohio

In Roman days THREE YEARS was none too long for



to slake and cure. The Secret of the wonderful strength and durability of ye old time mortars was in the long time perfect slaking and curing. None other than a wet process will accomplish this production of a perfect lime putty.

Hydrated Lime is the "BEST yet produced." Our prices are right.

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Celebrated Cheshire "Finishing" Lime

Well known throughout New York and the Eastern States as the finest finishing lime manufactured. The special feature of this lime is its quick and even slacking, thus preventing any cracking or checking when put on the wall. It is the best lime used in the country today for all

HIGH GRADE FINISHING WORK

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Tell 'em you saw it in ROCK PRODUCTS

The Ohio and Western Lime Company

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Ohio and Indiana White Finishing Lime, Ground Lime, Lump Lime, Fertilizer, Hydrate Lime, Cement, Plaster, Hair, Etc., Etc.

MAIN OFFICE: Huntington, Ind.

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We Sell Lime and Hydrate

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The Kelley Island Lime and Transport Company, CLEVELAND, OHIO

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MANUFACTURES LIME AND LIMESTONE FOR FLUXING DEALERS IN Lime, Cement, Plaster, Hair, Etc.

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High-Grade, Wood Burned Hart & Page LIME Plants at Rockford and Ruby, Ill.

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CEMENT WORKS: Austin, Minn. PLASTER MILL: Ft. Dodge, Iowa WAREHOUSE: Minnesota Transfer MANKATO, MINN

CROWN HYDRATE

HIGH CALCIUM HYDRATED LIME

The Most Perfect Hydrated Lime Made
Kritzer Vacuum Process

MARBLEHEAD LIME COMPANY

KANSAS CITY

CHICAGO

Banner Hydrate Lime

Manufactured at Gibsonburg, Ohio, by the

National Mortar & Supply Company

Offices: Pittsburg, Pa.

Daily capacity 150 tons

Ask for information

A. & C. Stone & Lime Co.

General Office: Indianapolis

Crushed Stone and White Lime

Sales Office at each Plant

Greencastle, Ind.

Portland, Ind.

Ridgeville, Ind.

Lime Kilns at Portland, Ind.—Crushers at all 3 Quarries Write the Plant nearest your Work for Prices CRUSHED STONE, all sizes, SCREENINGS CLEAN

Connections with 6 Railroads

Modern Machinery and Screens



DO YOU NEED

Elevators

Elevator



We manufacture a complete line of the above equipment. Also design and build special cars, buckets, hoppers. Send us your specifications-we will quote you promptly and believe we can show you we have what you want.

H. B. SACKETT SCREEN & CHUTE CO.,

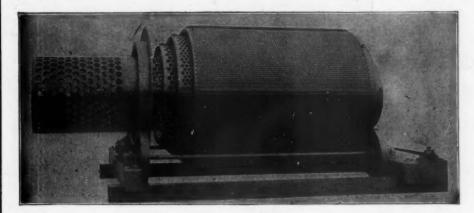
We have 5 new 11, yard cars similar to the above in stock ready for immediate shipment. We will quote you price on these that should interest you. We also carry a stock of track, turntables, switches.

If interested send for Catalogue R-31, which illus-

trates kind and quality of equipment we make

1679 Elston Ave., CHICAGO

JOHN O'LAUGHLIN'S SCREEN



The advantages of these screens are described in detail in a circular which WE WILL MAIL TO ANY ADDRESS. Mr. John O'Laughlin, the inventor, has designed many notable improvements in rock-drilling, quarrying, crushing and screening machinery, and uses these improved screens in his own crushing plants, which others have declared "to be the most perfect in existence in every detail." The O'Laughlin Screen is an important factor in the most modern and perfect stone-crushing plant.

made solely by Johnston & Chapman, is the

ONLY SCREEN

on the market for wide-awake quarry-men and miners, who want to separate crushed granite, limestone or other minerals, gravel, sand, coal or coke. It will soon earn its cost in saving of repairs, and maintenance, and reduced power, and will do more and cleaner work than any other cylindrical screen of like area. No one can afford to keep old traps in use when the O'Laughlin installed

NOW

will from the moment it starts give a better and larger product, and a big interest on your investment in continuous saving in cost of repairs, renewals, and power. For particulars, address:

JOHNSTON @ CHAPMAN CO.

Corner Francisco and Carroll Ave., Chicago, Ill.

Perforators of Sheet Metals, Flat, Cylindrical, and Conical Perforated Screen Plates for Quarries, Mines, Reduction Works, Mills and all Industrial Purposes.



Osborne Crushing Plant of the Springfield Coal & Ice Co.

We are prepared to ship crushed limestone from $\frac{7}{8}$ to $3\frac{1}{2}$ inches on short notice.

On account of the high percentage (96 to 98%) carbonate of calcium, this material is especially suited for fluxing.

Excellent Shipping Facilities and Prompt Service.

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RING-ROLL PULVERIZER



FOR HARD AND MODERATELY HARD ROCK

OUTPUT

2 to 20 tons per hour.

1} inch and finer.

PRODUCT 8 to 100 mesh and finer.

Send for Catalogue

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CITY LUMBER AND COAL CO., WATERBURY, CONN.
Covered with 15,000 square feet of Amatice.

They Figured Carefully and Chose Amatite

When a man is under the necessity of using a lot of roofing, he is pretty sure to study the subject with great care. That is why Amatite is so often used on the big ready roofing contracts. A man who has only a few hundred feet of roof will often be careless in his choice of roofing, but when it comes to thousands of square feet, (as above) Amatite is sure to be used.

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Barrett Manufacturing Company.

Dear Sirs:—We wish to inform you that the "Amatite" Roofing which we have used on our office, store house, lumber shed and barn has given most satisfactory service. The area that these roofs cover is about 15,000 square feet. The roofing is unusually attractive in appearance, and in our

judgment it is the most durable and satisfactory made. The fact that it requires no painting appeals to us very strongly, and this feature makes it by far the cheapest ready roofing on the market.

Yours truly,
CITY LUMBER & COAL COMPANY.
[Signed] F. B. Boardman, Treasurer.

The economy of Amatite is not only in its durability and its price (lower than any other mineral surfaced ready roofing on the market), but also in the fact that it requires no painting.

You may be sure it would cost something to paint their big roofs if they used a roofing that needed painting. All that is saved with Amatite.

A sample of Amatite will be sent you for inspection, free, if you will send name to the nearest Barrett office at once.

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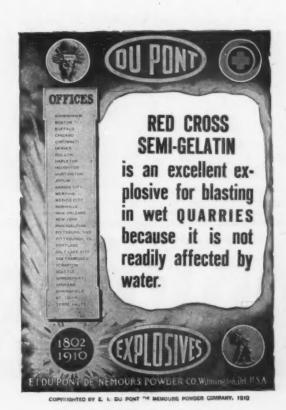
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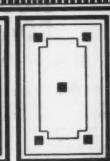
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Volume X.

CHICAGO, JULY 22, 1910.

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THE FRANCIS PUBLISHING COMPANY

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F. R. VAN HAMM

Communications on subjects of interest to any branch of the stone industry are solicited and will be paid for if available.

Every reader is invited to make the office of Rock Products his headquarters while in Chicago. Editorial and advertising copy should reach this office at least five days preceding publication date.

Entered as second-class matter July 2, 1907, at the Postoffice at Chicago, Illinois, under Act of March 3, 1879.

There should be a state association of retailers of builders' supplies

Too much system is almost as bad as no system at all. Strike a happy medium.

Don't be afraid to investigate the new things that come out. None of us know it all.

Even the humblest employees have good ideas occasionally. Don't be above consulting them once in a while.

Building operations all over the country continue unabated, the expected summer lull has not materialized.

Hydrated lime is forging to the front on sheer merit—and it brings the price, which speaks a volume in itself.

The hard wall plaster manufacturers are going to start an educational campaign. It's a good thing; push it along.

Sometimes a man makes money despite his slipshod methods, but think of how much more he would make if he changed them for the

The price of cement is still going up and still there are many big projects, in which cement will play an important part, that are yet to be

Keep up with the procession. Be in the front. When you feel yourself falling behind, get busy and find out the cause. Don't wait until it is too late.

The crushed rock operators are too busy nowadays to say much. Every city, town and hamlet has the road building fever. Let the good work keep on.

We know of some instances where the sale of byproducts has grown to be greater than the main propositions. The utilization of quarry waste is a problem which every man in the industry has to solve. If there is no demand for your byproduct, create one. Judicious advertising of just what you have will do more to create a market than anything else. You will always find that no matter what you have to sell there is someone, somewhere who wants to buy it.

If the other fellow in the same line of business is making money and you are not, it is time you woke up. There's a reason. Find out what it is. Don't always say it's luck.

Advertising may have increased the cost of living, but think of the things we would have missed if our attention had not been called to them by advertising. If we should stop advertising we would stand still, and he who hesitates is lost nowadays.

It is sometimes better to build a new plant than to keep making repairs to the old one. Consider the lack of efficiency of the old plant, as well as the cost of the constant repairs, and then investigate what improvements have been made in the style of machinery you are using.

The coming age will be one of fireproof buildings. The time is near at hand when the folly of building firetraps will be very apparent. Even if the first cost were very much greater, which it is not, the saving in maintenance, insurance and the practical elimination of loss of life, should be sufficient to decide any sane person.

It is the little things that count. Have nice stationery, a well painted and attractive sign on your building, a neat office, good teams, well-kept books and orderly warehouses, and see what an improvement you will notice. We all form opinions from little things. If you don't think well of yourself how can you expect others to do so?

The railroad bill, recently signed by the president, will go into effect about August 20, except that part which is already in effect prohibiting the railroads from making the recent proposed advances until the Interstate Commerce Commission has an opportunity to hear the claims of the roads in this particular case. This is perhaps one of the most impor-tant bills passed by the congress and shippers should acquaint themselves with the provisions of this law so that they may reap its benefits in full.

The foremost construction engineers of this country are overlooking an important factor in their opportunities. For themselves they do not investigate the improvements in machinery, and this is more particularly true of strictly office engineers. Very often they select an obsolete mixer, for instance, because they lack investigation. They suspect the claims of larger output and more complete economy in new machines as unreliable, for the very reason that they are invariably larger than older practice and ideas.

The dates for the New York and Chicago cement shows having been announced, there should be some steps taken which would eliminate, if possible, the usual crop of impossible propositions sprung every year by the poor, deluded inventors of world-revolutionizing machinery. should be a board of supervisors, made up of absolutely impartial men, whose duty it should be to pass upon the eligibility of every exhibit. There should be no necessity of cutting down the size of the exhibits; better still, cut out the unnecesary ones, and thus raise the standard.

The president has a grave responsibility placed upon him, that of filling the vacancy caused by the death of the late Chief Justice Fuller. country is entering upon a most important part of its constitutional history and the next chief justice, if he is wisely chosen, may play a most conspicuous part in the future peace and welfare of the nation. While there are many purely questions of state, there are some very vital questions that this tribunal will be called upon to decide affecting the commercial status of the country. So, looking at it from all sides, the appointment of a new chief justice is one that the country at large is vitally interested in and one that the president can ill afford to make in haste or without due consideration.



L. V. Thayer, president of the Peerless Brick Machine Company, Minneapolis, has been taking his summer vacation in the White Mountains and on his old stamping ground on the shores of Lake Champlain. As usual, Lou is a busy man and he succeeds in mixing business with pleasure while recuperating.

J. P. Beck, of the Universal Portland Cement Company and manager of the Cement Products Exhibition Company, is taking his vacation at Michigan summer resorts, but you may depend upon it that he is using his think tank with regard to the two great shows which are to be pulled off next winter; the one at Madison Square Garden, New York, in December, and the other at the Coliseum, in February.

Francis M. Barton, architect and concrete engineer, of Chicago, has just completed a building for the Fleischman Compressed Yeast Company, at Nos. 418-20 Canal street, which is the finest in Chicago for an office and workrooms for this or similar purposes. The Barton Spider Web system of reinforced concrete was used throughout the job and it is finished with mosaic tile floors, white glazed walls and tile wainscoting six feet high, the outside being finished with white glazed terra cotta.

Mr. Barton is just letting the contracts on a building containing seventy-eight flats, located in Memphis, Tenn., for Dr. Bynum, of that city. The work is all reinforced concrete, using the Barton Spider Web system, and the whole investment amounts to not less than a quarter of a million. Some of the contracts have not yet been let and figures are being accepted on these.

Mr. Barton is deep in his studies of the design for the concrete house which the Cement Products Exhibition Company is about to build for Miss Williamson, who won the house at the Chicago Cement Show, last February. Although Mr. Barton works more particularly in other types of buildings, his achievements in residence construction are second to none and his deep interest in the cement industry is a known fact, and the design and arrangement of the cement house which the fortunate young lady will receive will be a credit to the cement industry as well as to the designer.

The full military band of John Philip Sousa has been employed by the Cement Products Exhibition Company for the Cement Show in New York, next December.

James Lawrence Bernard, head of the New England office of the Edison Portland Cement Company, is always on the job and doing good work for the concrete industry throughout New England. He lives down at Buzzards Bay, Mass., at nights, and is never more at home than when he is in the salt water, unless it might be when he is chasing down a cement specification, and there is evidence that he is good at that game.

Howard B. Green, of Philadelphia, Pa., who is by nature a cement salesman, and popular with many of the readers of ROCK PRODUCTS, is representing the Lehigh brand in the great Philadelphia market.

Heppenstall & Marquis, supply dealers of Pittsburg, Pa., have recently been making extensive improvements by putting in concrete storage bins for their coal department. The big bents or concrete columns which carry the railroad tracks, were put in under the personal direction of George Heppenstall, and it is a very creditable job, at least that is the way it looked when we saw him recently, using a Universal bag for an apron and bossing the mixers from the top of the frame work. This illustrates that the dealers of cement are

This illustrates that the dealers of cement are learning how to use this excellent material themselves. Rock Products has on occasions repeatedly recommended such a course, and it has been adopted in many cases.

Professor A. V. Bleininger, the government's expert in clay and lime, will resume some of his former work at Illinois University, at Champaign.

A. Munsell, who has been busy with the inspection of materials at Detroit for the international tunnel under Detroit river for several years, saw the aviators fly at Atlantic City the other day, and remarked: "What's the use of tunneling, anyway, when these fellows show us how to fly over?"

The United Shoe Machinery Company are building a great machine shop and factory at Beverly, Mass. Ernest L. Ransome is the engineer, and it is entirely of reinforced concrete construction, using Edison Portland cement.

Charles Warner, Wilmington, Del., president of the National Builders' Supply Association, extensive manufacturer of lime and cement, distributer and dealer in building supplies, in speaking of trade recently said: "This will not be a record year in the eastern district, but a year of normal demand and consumption." In one of his lime manufacturing connections he is building a lime-burning and hydrating plant in West Virginia near the Maryland line, and says it will be the finest and most complete establishment of the kind in existence. Dr. E. W. Lazell and Irving Warner, of the technical staff of the Charles Warner Company, are in charge of the construction, which is now fast approaching completion.

Ross F. Tucker, president of the Concrete Products Company, New York, manufacturers of Pauly concrete tile for the metropolitan market, has very successfully introduced the goods under the name of "tilecrete." It is gaining in popularity with the more intelligent builders every day. The plant at Flushing is running with very large output.

E. Schmatolla, 150 Nassau street, New York, lime kiln designer and gas expert of international reputation, is just completing a mammoth kiln for H. Harris at Beverly, near Providence, R. I.

H. E. Hillis, of the ancient and active house of Samuel H. French & Co., Philadelphia, observes that the delivery department of the supply business in the city of magnificent distances is one of first importance, and always to be considered. Incidentally he remarked that the Dexter mill is running full time. It is said that the Dexter brand of white eement will soon be on the market.

Charles C. Kritzer, the lime-hydrating specialist of Chicago, observes with pardonable pride that his easiest business is with old customers whose increasing business demands additional plants.

D. J. Kennedy and James C. Adams were enjoying the breezes from the motor fans the other day in their office at Pittsburg. The feature of the supply business was the great demand for Lehigh cement, Darlington brick, and American plaster. Mr. Adams remarked that it seemed impossible to get in enough cement.

Clifford L. Miller, 110 East Twenty-third street, New York, has a new interior decoration material which is imported from France, and very popular with the ultra-esthetic builders for a class of treatment hitherto unattainable. It is called Caen stone cement, being a plaster capable of being tooled like stone, the work being done in place.

Robert E. Griffith, who is in charge of the construction of the new cement mill of the American Cement Company, at Norfolk, says that we may be expecting a good flow of "giants" from Virginia

C. W. Boynton, the inspection expert of the Universal Portland Cement Company, Chicago, spent what he calls a vacation at the meeting of the American Society for Testing Materials, and afterward gathered in a lot of eastern technical information. He is full of his special subject, but a full man is always able to get fuller.

Richard K. Mead, of Allentown, Pa., chemist and consulting engineer, spent his 4th of July vacation at his native Virginia home and incidentally visited the plant of the Tidewater Cement and Lime Company in Maryland.

Lewis H. Ferguson, the Raymond concrete tile man, of Philadelphia, remarks that there is plenty of business in the great Eastern market.

Morris M. Hunter, of the Edison Portland Cement Company, is spending his vacation at the New York office of that company, and he and F. B. Marsh, publicity engineer of the Edison company, recently had a cordial welcome for the ROCK PRODUCTS scribe.

Mr. George E. Nicholson, president of the Iola Portland Cement Company, was married to Mrs. Ida H. Anderson, of St. Louis, recently. The ceremony was performed in the parsonage of the Kingshighway Presbyterian Church by the Reverend Merle H. Anderson. Mr. Nicholson was attended by his two sons, George A. and Ralph E., of Baldwin, Kan., and the bride by Mrs. J. W. Beatty, of Collinsville, Ill., and Mrs. Frank H. Steeg, of St. Louis, sisters and girlhood friends of Mrs. Nicholson, who formerly lived in Collinsville. Robert Anderson, a son of Mrs. Nicholson by her former husband, was one of the ushers. The guests included Mrs. Goodwillie, of Chicago, Mrs. Florence Simons, of Omaha, Neb., and Mrs. W. W. Hornsback and her daughter, of Edwardsville, Ill. After the ceremony the bridal couple left to visit the various resorts on the great lakes. On their return they will reside in Kansas City. Mr. Nicholson is one of the most prominent capitalists in the West. He has been engaged in many large enterprises, and has amassed a fortune. He has been the recipient of congratulations from his wide circle of friends.

John M. Campbell, for more than twenty years the head of the firm of Campbell, Morrell & Co., of Passaic, N. J., has severed his connection with that establishment and become the manager of the New York office of the American Sewer Pipe Company, at 30 Church Street. Mr. Campbell is one of the wide awake and enterprising men in the supply business, and there is no question of a doubt but that as a distributor of the big American Sewer Pipe Company he will again prove his sterling worth and great value to the institution with which he is connected. Mr. Campbell has always been one of the stalwart friends of ROCK PRODUCTS and in this new connection we extend to him our kindest good wishes and bespeak for him throughout the trade the first consideration, which his own charming personality will win for him as his acquaintance is continued by a length of time.

William Miller of the Northwestern Expanded Metal Company has been investigating the crop conditions in Iowa and through sections of the Northwest, and he reports business far from being unsatisfactory, although one retarding feature of the demand has been the fact that a great deal of money has been taken out of the western states by farmers and put into the Northwest and Southwest in land, both fruit and farm property, and they have done it on such a large scale that it has left its imprint on the bank statements and perhaps reduced the volume of business in building lines.

He states that notwithstanding the crop scare in the Northwest, that good business will be the rule this fall. "Bill" is an overcoat apostle nowadays, and the first thing you know you are liable to come home some night and find out you have a new coat on your wooden house, and you will wonder whether you are sober, for you now have a beautifully decorated

Mr. Miller says the Northwestern Company is enjoying good business in their regular lines.

J. B. Tuthill, president of the Tuthill Building Material Company, was attacked with pleurisy last May and confined to his home for several weeks. In June he was about his business for a short time, when he had a relapse and has not been down to business since. He has had a hard siege but is now sitting up and in a few days will again meet his friends at his office with the same hearty handshake.

Ben H. Alvey, a Kentuckian, has patented a device for loading and unloading ships which will be used in connection with two shipments of cement from New York to the Panama Canal.

Before the great public will learn to buy your goods it must be educated, and education is slow work. Little by little you must impress upon people the facts with reference to your products. And little by little the public mind will come to understand what it is all about. The result will be sure, and the reward in proportion to the liberality of your educational campaign.—Saturday Evening Post.

The E. I. Du Pont de Nemours Powder Company is extending the use of electric power in all its plants. Among its recent orders from the Allis-Chalmers Company are eleven type "K" direct current motors for its plant at Wilpen, Minn., and fifteen induction motors for the works at Hillside Junction, Pa.

The Oklahoma Portland City Portland Cement Company, Oklahoma City, Okla., recently amended its charter, changing the name of the company to the Choctaw Portland Cement Works.

The 1907 build. The fires : fire I premi \$456, total leum. The build 709, a The J Euro about the wealth

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FIRE LOSS.

The total cost of fires in the United States in 1907 amounted to almost one-half the cost of new buildings constructed in the country for the year. The total cost of the fires, excluding that of forest fires and marine losses, but including excess cost of fire protection due to bad construction and excess premiums over insurance paid, amounted to over \$456,485,000, a tax on the people exceeding the total value of the gold, silver, copper and petroleum produced in the United States in that year.

The actual fire losses due to the destruction of

actual fire losses due to the destruction buildings and their contents amounted to \$215,084,709, a per capita loss for the United States of \$2.51.
The per capita losses in the cities of the six leading European countries amounted to but 33 cents, or about one-eighth of the per capita loss sustained in the United States. In addition to this waste of wealth and natural resources 1,449 persons were killed and 5,654 were injured in fires.

The buildings consumed, if placed on lots of 65 feet frontage, would line both sides of a street extending from New York to Chicago. A person journeying along this street of desolation would pass in every thousand feet a ruin from which an injured person was taken. At every three-quarters of a mile in this journey he would encounter the charred remains of a human being who had been burned to death.

No structure of the future should be built of ood. It has taken costly lessons to teach us this, but if we have at last learned the lesson, the price we have paid is cheap.

It has long been realized that, with the wood sup-It has long been realized that, with the wood supply of the world constantly diminishing, wood was bound to become too expensive to use as a building material. But it is not so widely realized that the day when wood is as costly as non-combustible building materials is here. Today, concrete structures, and in some localities other non-combustible structures, can be created at no greater first cost structures, can be erected at no greater first cost than wooden ones; with an added element of safety to those who use the building which cannot easily be overestimated.—[From Bulletin 418, Issued by the United States Geological Survey.

Richard L. Humphrey, president of the National Cement Users' Association, recently remarked that the members would do well to remember the stand-ard specifications of that body and try to secure their adoption for municipal and other work in which they are most deeply interested.

A. Kimball, sales manager of the Atlas Portland Cement Company, New York, enjoys no vacation more than the regular work of his pleasant office. With fair crop reports and normal demand or a little better, even the Fourth of July kind looks good—provided a man don't look at the mer-

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PAULY CONCRETE TILE IN CHICAGO.

The Chicago Structural Tile Company, 353 Dearborn street, is in the market with a full line of concrete tile of the Pauly type. The plant is located in the suburb of Lemont, with the best shipping facilities to Chicago and environs, full of work and opening prospects very promising. This opens up for the first time to builders in the Chicago district the great advantages of this incombustible, This opens safe, sane and sanitary material for home-building especially, and equally adaptable to every type of construction.

Amos Kendall, better known as "Jerry," is spending his vacation at Whitmore Lake, Mich. He has a beautiful little bungalow on the side of the lake, and is indulging his "piscatorial propensities." Jerry is one of the boys that works hard when he works, and plays with corresponding zeal. His friends will not only expect to be regaled with fine fish, but good fish stories as well, when he returns.

ADVERTISING IS A SYSTEM OF EDUCATION.

When you send a boy to school you do not com-

When you send a boy to school you do not complain that his time and your money have been wasted because he does not graduate the first month. You know that the mind has to receive and assimilate many facts and that an education must be acquired little by little. It is the end that crowns the work. Do you view advertising in the same light? If you do not you are making a mistake.

CHANGES IN J. R. ALSING COMPANY.

Walter Ives, for the past nine years connected with the staff of the Engineering and Mining Journal, and Edward B. Sturgis, E. M., a mining engineer of many years' experience, have affiliated themselves with the J. R. Alsing Engineering Company, manufacturers of crushing, grinding and pulverizing machinery. They have largely increased their engineering force; obtained better manufacturing facilities, and made many other improvements. They are also moving to larger and more commodious offices, at 90 West Street, New York City, and are better equipped than ever to promptly and satisfactorily fill any and all orders.

The J. R. Alsing Company was the pioneer manufacture of tube mills in the United States, and has been building them for forty-two years.

Mr. Ives is at present on an extended European trip in the interest of his new firm. Walter Ives, for the past nine years connected

trip in the interest of his new firm.

The large cement and brick plant of the Meacham & Wright Company, located at North 46th avenue and West Indiana street, Chicago, was destroyed by fire The loss is estimated at from \$75,000 to

William Sewell, of Sunderland, Eng., who has been visiting in this country, sailed for home on the Lusitania, the big twin screw liner that holds the record, on the 20th. Mr. Sewell said that he enjoyed his trip immensely. He was very much interested in the big concrete plants which he visited.

FAR IN EXCESS OF LAST YEAR.

A. W. Ransome, of the Ransome Concrete Machinery Company, Dunellen, N. J., writes us under date of July 18, in regard to trade conditions, as follows:

"When a concern is working night and day to keep up with orders, they have little opportunity to speculate as to whether or no the condition which brings these orders is healthy.

"Our sales have been made from Maine to California, and from Florida to Canada, and we have also been doing a fairly good export business.

"By June 1 of this year we had done a total business amounting to more than the business done during all of 1909, and at present indications point to a volume for the second six months nearly as large as the first."

Evidently the Ransome Concrete Machinery Company has little time to indulge in speculations. Rock Products congratulates them on the amount of business done, and trusts that the latter half of 1910 will even show a larger business than the first half, and excel their expectations!

MARRIED AT ELKS' CONVENTION.

Benjamin Marsh, a prominent builders' supply man, of Worcester, Mass., and charter member of the Worcester Lodge of Elks, No. 243, was married to Mrs. F. A. Newkirk, of Detroit, during the recent Elks' convention in that city. The ceremony took place in the residence of Mr. and Mrs. L. P. Carrier, No. 25 Bagley Avenue, where Mrs. Newkirk had been living. Rev. A. C. Manson, pastor of the Second Presbyterian Church, performed the ceremony. A room in the Carrier residence was appropriately decorated with purple and white. They mony. A room in the Carrier residence was appropriately decorated with purple and white. They were married under a large purple and white bell, under which were hung purple and white sweet peas. Miss Greta Carrier acted as bridesmaid, while "Jack" Canton officiated in the role of best man. After a bridal tour they will make their home in Worcester, where Mr. Marsh is well and popularly known.

The Silica Brick & Stone Company, of Washington, D. C., has been incorporated with a maximum capital stock of \$50,000 and a minimum of \$5,000 for the purpose of manufacturing and selling building materials. The officers of the company are J. H. Cranford, president; Percy Cranford, secretary, both of Washington; R. Y. Filbert, of Philadelphia, Pa., of Washington; R. Y. Filbert, of Phi and C. M. Field, of Rutherford, N. J.



BANQUET OF CEMENT MANUFACTURERS AT THE LA SALLE HOTEL, CHICAGO.

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Meets Annually.

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Official Organ, ROCK PRODUCTS

ALL ABOARD FOR CEDAR POINT!

The Ohio Builders' Supply Association will hold its annual summer meeting at Cedar Point on August 19th and 20th. Although the official program is not yet out, the usual interesting business sessions, accompanied by the most pleasant diversions, will be the general order.

the general order.

Every retailer of builders' supply in the state of Ohio is invited to attend this meeting. If you are not a member, get in communication at once with the secretary, Bert J. Graham, 1335 Scofield avenue, Cleveland, Ohio. It is needless to say anything regarding the meeting to those who have been in the habit of attending in the past, because it would be practically impossible to keep them away, as they know what a royal good time awaits them. However, for the benefit of those who have never attended one of these most delightful gatherings, we will say that the meetings held in these environments are both interesting and instructive to every retailer of supplies, and have accomplished more good and have been productive of better results than almost any similar gatherings of retailers.

W. A. Fay, of Cleveland, is the president of the

w: A. Fay, of Cleveland, is the president of the association; Bert J. Graham, of the same city, secretary; R. E. Doville, of Toledo, is treasurer; Dan A. Raridan, of Athens, first vice president; Eugene Cook, Newark, second vice president; J. Q. Adams, of Coshocton, third vice president; W. O. Holst, of Toledo, fourth vice president, and J. L. Rice, of Marion, fifth vice president.

A large number of the members bring their wives and daughters, and the occasion is one of much social enjoyment. The Ohio association is one of the strongest in this country, and the meetings are always well attended. Unless all signs fail this one will be the largest in point of attendance and the most enjoyable from a fun standard. from a fun standpoint.

FULL MEASURE LIME.

Salt Lake City, Utah, July 20.—Sam Edwards and Enoch Christofferson have opened a warehouse at 500 South Third Street, to handle lime, cement, at our south Third Street, to handle lime, cement, plaster and kindred materials. Both members of the firm are thoroughly familiar with the building supply business, and it is the intention of the firm to make a specialty of "full measure lime."

DEATH OF F. C. LAUER.

It is with a feeling of deep regret that we here record the death of Frederick Charles Lauer, of Rochester, N. Y., on June 23, who was one of the first friends of Rock Products and who has always

hers triends of ROCK PRODUCTS and who has always been our steadfast friend and ally.

Mr. Lauer is well and favorably known as a lime manufacturer, as a contractor and as a dealer in building materials. He died from a complication of diseases which finally affected his heart, after being a sufferer for more than three months. The wide circle of his friends participate with us in the less to the trade, to his friends and to his family.

loss to the trade, to his friends and to his family.

Mr. Lauer was born in Rochester August 17, 1845, his parents being natives of Prussia. At the early age of 15 years he associated himself with his father, who was a stone mason and contractor, and has been, all the balance of his life, in the front reality with the more who do things in his parties site. ranks with the men who do things in his native city.

Although a man of modest disposition, he has enjoyed some prominence in politics, having served as a member of the school board, as well as on many other civil and municipal committees and boards. He served as county supervisor and alderman, always taking a deep interest in public affairs.

Many years ago he established the Rochester Lime ompany, which is one of the principal factors of Company, which is one of the principal factors of the lime industry in Rochester. In connection with his two sons, Walter F. and George W., he or-ganized the general contracting firm of F. C. Lauer & Sons, and, a few years ago, this firm was suc-& Sons, and, a few years ago, this firm was succeeded by a corporation of the same name. This extensive business in building materials and in contracting will be continued by the estate and George



THE LATE FREDERICK CHARLES LAUER, ROCHESTER, N. Y.

W. Lauer, who inherits his father's push and busi-W. Lauer, who inherits his father's push and business ability, has taken up the reins where his father let go. The business will be conducted on practically the same lines as have given satisfactory results to a long line of customers throughout the space of a generation. It is indeed gratifying to see the son succeed the father in this way, and George has had many years of tutelage with the advantage of his father's long experience. Nothing but success can come to one of his caliber.

Mr. Lauer was a Mason of high degree, an Odd Fellow, and has served as an officer of the national

Mr. Lauer was a Mason of high degree, an Odd Fellow, and has served as an officer of the national guard of the state of New York. He was a Chris-tian gentleman, a Knight Templar and a member of the Church of the Reformation from early man-hood. Mr. Lauer was one of the big-hearted men whose place can not well be filled.

ESTABLISH RETAIL YARD

Oklahoma City, Okla., July 18.—The Southwest-ern Material & Supply Company, which has hereto-fore confined itself to doing a wholesale business in building materials of all characters, has decided to establish a retail yard in connection with its whole-sale business, to be located at Second Street, West-Avenue and the Rock Island tracks

The Yakima Concrete & Builders Supply Company has been incorporated at North Yakima. Wash., with a capital stock of \$20,000, by W. W. Felton, B. F. Young, C. H. Wimer and A. H. Smith.

CHICAGO RETAILERS.

Chicago, July 19.—Practically all retail builders' supply dealers in the city report a surprising activity in business this month, which usually has been inactive and quiet in past years. There are more small flat buildings and dwellings going up this summer in the north, west and south divisions of Chicago than in many previous years. The outskirts of the city are being built up rapidly, an inevitable sign of the growth and great prosperity of this community. Skyscrapers in the business district are progressing rapidly and most of them, started last fall, will be under roof before snow flies. There has been some halting in contemplated building operations in the business cencontemplated building operations in the business cen-ter which will be started later in the season. Every-thing looks bright and builders' supply dealers feel assured of an exceedingly active busine ess to the close of the year.

Continued improvements seem to be in progress at the yards of the Lake Building Material Company. Foundations are nearly completed for another large warehouse there. This warehouse will be finished in storing six carloads of cement. Matt A. Mueller, president of the company, said, "We are doing a good business, though not pressed as hard as last month, and will deliver as much material as in June. Building operations in this territory, 47th Street and Hoyne, has naturally slackened some, but concrete walks are being laid practically all over this section and much plastering is being done. We are making preparations for doing a big business commencing in September."

September."

Business is very brisk with the Tuthill Building Material Company this month. All of its teams have been busy delivering material to jobs, as much so as in the busy month of June. It is reported that there is as much building going on in the southern part of the city as in early spring. They are mostly flat buildings which are rented as fast as ready for occupancy. There will be a big demand for cement and other building material with the opening of the coming season.

J. B. Coates of the Crescent Material Company has been as busy as ever this month. His teams have done all the hauling they could possibly do. There is much activity shown in his territory finishing flat buildings started in the spring. It is too early to start new buildings but there is much work in sight and the Crescent Material Company at the corr of Low Avenue and 65th Street is preparing for business next fall.

big business next fall.

"It was quiet the week before the 4th of July, but since then it has been a surprise how active business has been," said Walter L. Woods, president of the Standard Material Company. "There is a great deal of building done in this section of the city. It consists of 2, 6 and 12-flat buildings almost entirely. From present indications and from hearing contractors talking of contracts they have signed for the coming fall, there will be a big and active business.

tractors talking of contracts they have signed for the coming fall, there will be a big and active business. It can be confidently stated that there is little cutting of prices done, dealers maintaining prices well."

"Business is good and steady, though we are not rushed as we were in the spring," said W. O. Heitman of the Union Coal, Lime & Cement Company, at Ashland Avenue and 59th Street. "Contractors in this territory want to clean up before they commence new work. They have much new work in hand which will be started a month later. Prospects are exceedingly bright for fall."

A good active business is being done this month

are exceedingly bright for fall."

A good active business is being done this month by the Chicago Contractors' Supply Company. All of its teams are busy, perhaps not quite as much so as two months ago. Contractors talk of having much work in sight which will be started early in September. Building in its territory keeps up briskly this month and the company expects lively times commencing with the opening of the fall season.

George C. Marsh of the Chicago Builders' Specialties Company reported as good a business this month

ties Company reported as good a business this month as during the month of June. "No specially big orders," he said, "have been booked, but a lot of medium sized orders for builders' specialties have made a nice volume of business. Things are moving along very smoothly and the outlook is very bright."

A. L. Halleman, secretary and treasurer of the

A. L. Halleman, secretary and treasurer of the Templeton Lime Company, said, "Business is as good as in June; there has been no let up. We keep our eleven teams busy and hire five extra ones. We are doing almost a rushing business; it is surpris-ing. There is as much building done in this territory

ng. There is as much building done in this territory now as there was early in the spring and there will be more in the fall. Conditions were hardly ever better and the fall season will prove a good one."

At the factory and yards of the J. J. Crooke Company business was found to be as active as last month. The demand for their concrete blocks for foundation and superstructure remains active. Many stores are being built in this territory and many more are in contemplation this fall. Collections were

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reported to be dragging some, but otherwise condi-

reported to be dragging some, but otherwise conditions were considered fine.

A. J. Druecker of N. J. Druecker & Co. said, "Slackening of business has always been characteristic of this month in the past and is so this year. Business is quiet relatively, but not dull. There is not much building done in this territory, west of Western Avenue and north of Humboldt Boulevard. Contractors say, however, they have much work in hand which they will start about September 1. We expect a heavy business with the opening of the comexpect a heavy business with the opening of the coming season. Everything looks bright.''

expect a heavy business with the opening of the coming season. Everything looks bright."

Alfred Frerk of Henry Frerk's Sons said, "Business is quiet this month, but not dull. There is not much building done around here now, but there will be again in the fall. Everything looks bright and we believe there will be lively times in the fall."

M. A. Staley of the M. A. Staley Company was caught repairing the line to his telephone. He had not forgotten how to do it, as 29 years ago he had charge of all the lines for the Chicago Telephone Company on the North Side when there were only 40 telephones used there. Having put his instrument in order, he said, "I can not afford to be cut off from the telephone service an hour this month. Business is more than good and keeps up as it did in the from the telephone service an hour this month. Business is more than good and keeps up as it did in the spring. Is there much building in this vicinity? Look over the prairie to the west and you will find that the circus which camped there year after year has no room to pitch its tents now. The prairie is too closely built up. Everything looks good and there will be big business in the fall.''

Things were rather quiet at Jas. E. Lill's. Business was reported slacking up from last month but

ness was reported slacking up from last month, but could hardly be reported dull. Collections were said to be dragging and money a little tight. A big business is anticipated the coming fall.

LOUISVILLE RETAILERS.

Louisville, Ky., July 15.—The building material market in Louisville is in good condition, several of the biggest projects which have been handled in years now being in course of construction. Rainy weather has, it is true, interfered with building to a certain extent, but every time the sun shines business begins moving again, showing that that is all that is

June made a good showing in the matter of building, as indicated by the records of the building inspector, R. J. Tilford. The total number of permits issued was 266, representing an outlay of \$438,000, compared with an expenditure during the correspond-ing month of last year of \$55,000 less. July is also

expected to make a good showing.

Some disappointment has been felt as the result of the announcement of the Caldwell estate that it will not erect the 15-story office building at Fifth and Jefferson streets which was announced several months ago. No reason was given for the decision, and it is housed that it may be built after all. The and it is hoped that it may be built after all. annex to the Weissinger-Gaulbert apartment

which will be a big job, has gone over until the fall.

J. B. Speed & Co. report business heavy, and the demand for cement is excellent. An advance was recorded late in June, and it is expected that before the month is over further increases in the price will be made. There is a good general demand for cement, though building is not as active as it might be. There is much municipal work, in the way of side-

walks and streets, going on, and this is of course taking a lot of cement.

The market on cement was reported firm by the Union Cement & Lime Company, George F. Meldrum stating that though the sunshine has been infrequent,

Union Cement & Lime Company, George F. Meldrum stating that though the sunshine has been infrequent, sales have been numerous. The price has strengthened considerably since last reports, and the mills are quoting only for immediate delivery. The company is handling Lehigh cement in this market, and the brand has made its way rapidly.

"The diversified uses to which cement is now being put," said Mr. Meldrum, "are responsible largely for the heavy demand. The manufacturers have been pushing an educational campaign in this direction for several years, and they have gotten the results. Small quantities may be used on single jobs, but the aggregate is large."

Burrell & Walker are having a good demand for drain pipe, though the interruption to building caused by the bad weather has held back orders somewhat. The company handles the product of the Owensboro Sewer Pipe Company, of Owensboro, Ky., and carries a good stock in the building which it occupies on North Third Street. The company has added a big building to its factory, Burrell & Walker stated, this being 300'x90', and has also installed 10 additional kilns. John G. Delker is president of the concern.

The Samuel F. Troell Company is doing a good

The Samuel F. Troell Company is doing a good business in roofing, some of its jobs including the Peerless Manufacturing Company's new plant, which

requires 600 squares, and the new building of the East End Amusement Company, the asphalt roofing of the Johns-Mandeville Company, Regal brand being used. A pitch and gravel roof is being put on a new building of the Kentucky Distillery and Warehouse Company, this taking 350 squares. The Corydon National Bank Building, at Corydon, Ind., will be given a roofing of the Lohns-Manville Company's built-up. a roofing of the Johns-Manville Company's built-up a rooms of the Johns Manville Company's built-up asbestos. Walter Hierich, of Louisville, is architect for this job. A built-up gravel roof is being put on the new building of the Mengel Box Company, at Hickman, Ky. The company has found the material

the new building of the Mengel Box Company, at Hickman, Ky. The company has found the material of the Barrett Manufacturing Company popular. Business with the Southern Brick & Tile Company is good. Owing to bad weather the demand has fallen off a little of late, but the volume totals up handsomely. Prospects for the rest of the season are excellent. excellent.

The National Roofing & Supply Company, reported Edward Straicher, is doing a good business on its Cabot creosote stains, and is also handling a good many jobs of roofing. The prospect for the month is excellent, as the company is figuring on a lot of

The Kentucky Vitrified Brick Company and the P. Bannon Sewer Pipe Company, allied concerns, are doing a big business on sewer pipe and vitrified and fire brick. The demand in all these lines is so good that the plant is running full blast. Collections are better, also.

The Breckenridge Realty Company has been organized for the purpose of erecting a \$90,000 apartment house at Second and Breckenridge Streets. Henry Levy is president of the company, which has a capital stock of \$100,000.

Plans are out for the new First Christian Church, for which McDonald & Dodd are the architects. The cost of the building will be \$150,000. Bids will be received for several weeks and the contracts let in

The Engineers' and Architects' Club has formed plans for the improvement of the city through the opening up of new streets, especially in the southern part of the city, where the outlets are few. J. C. Murphy, of D. X. Murphy & Bro., has been made chairman of a committee to present the matter to the city officials. The other members of the committee are F. H. Miller, Pierce Butler, Brinton B. Davis and A. T. Macdonald.

The Southers Roofing and President Committee the committee that The Engineers' and Architects' Club has formed

The Southern Roofing and Paving Company, against which action in bankruptcy was taken in the federal court recently, has filed a consent to the set-tlement of its business. It was consequently adjudged bankrupt. The company has not filed its schedule of liabilities or assets. The company was organized to do concrete paving work, and for a time met with marked success. The officers are: C. A. Monks, president and treasurer; J. C. Zulauf, vice-president, and

J. B. Pace, secretary.
C. Edington has been named as superintendent of the West Virginia Clay Products Company, of which W. E. Caldwell, the machinery man of this city, is president, and it is announced that the company will shortly begin operations on its site near Charlestown, W. Va. The machinery is to be bought within the next few weeks, and will cost from \$40,000 to \$50,000. The company will manufacture fire brick and other

Lexington's first asphalt street will be built by the Andrews Asphalt and Paving Company, of Hamilton, O., a contract having been let by the municipal authorities. The street will cost \$60,000.

The Cannelton Sewer Pipe Company, of Cannelton, Ind., is contemplating the erection of a branch factory at Evansville, Ind.

The Busse Brick Company, of Kenton county, ha filed amended articles of incorporation, increasing its capital stock from \$25,000 to \$50,000.

CLEVELAND RETAILERS.

Cleveland, O., July 16 .- Business in Cleveland during the past month among the material and supply men and the contractors has been quite active and satisfactory. Despite the slowing down supply men and the contractors has been quite active and satisfactory. Despite the slowing down of some of the other idustries, due to unsettled political conditions, the building industry has not been seriously affected. A number of big projects have been announced during the month which will keep the latter half of the year quite as active as the first six months have been.

Figures for the first six months as compiled by Figures for the first six months as compiled by the building inspector's office show the volume of business done from January 1 to June 30 to have been practically the same as for a similar period a year ago. The total amount invested, according to building permits, was approximately \$7,000.000. Building permits, however, are seldom taken out for more than half the building's value, and it is estimated that between \$12,000,000 and \$14, 000,000 has actually been spent for the first half year's building operations. Considerable competition still exists in the sup-

ply market and some severe price slashing is reported. Cement is reported about the same, sellported. Cement is reported about the same, sening at \$1.25 per barrel in wagon lots and down to as low as \$1.05 for big contracts. Huge quantities of cement are being used this year and most of the big supply houses are carrying large stocks. Cement in the last five years has come to be one of the chief items in the supply business in Clevelund or elecuhare.

nd as elsewhere.
The Contractors' Supply Company, of Cleveland, which was launched about a year ago, has been absorbed by the Cleveland Builders' Supply Company, of this city. The employes of the concern have entered the employ of the Cleveland com-

BALTIMORE RETAILERS.

Baltimore, Md., July 19 .- The retail trade in this city is jubilant owing to the fact that prices have increased in nearly every branch of the trade, in-cluding cement, which has advanced as much as 30 cents in the past four weeks. The building supply concerns are doing a rushing business and they say the prices are expected to advance still higher,

There is a great amount of work going on in Baltimore now and a greater part of it will require both cement and stone. As a matter of fact there is more concrete construction in progress now than

The National Building Supply Company is doing an excellent business and is furnishing the cement for some of the most important jobs in the city. Among its largest contracts recently awarded are the new 15-story Fidelity building at Charles and Lexington streets, the New Theater at Park avenue and Lexington streets, Notre Dame College and the Country School for Boys.

The company is also furnishing a good part of the cement for the sewer work now in progress and many other smaller buildings than noted above.

ST. LOUIS RETAILERS.

St. Louis, July 19.—Dealers in building material and manufacturers of the same report very active markets, particularly as regards Portland cement, and beside the local demand there is a heavy demand from the middle West and the Southwest. Building operations are going forward vigorously in St. Louis, but independent of some large structures that are in progress the majority of the new buildings are of moderate size and cost, though, as they are quite numerous, the aggregate is large as to the quantity of all kinds of material required in their construction. Labor troubles have been adjusted for the most part, and the outlook is satisfactory. Owing to the crop movement which is now on, calls for funds from the interior make a firm money market, and this is some hindrance to new enterprises for the time being. A feature of the present time is the enlargement of factory plants and the entrance of new companies, nearly all of which are erecting buildings for their use.

St. Louis has won a deserved reputation for the strention given the construction of factory build-St. Louis, July 19.-Dealers in building material

St. Louis has won a deserved reputation for the attention given the construction of fireproof buildings during the past five years. Statistical data shows that out of fifteen cities St. Louis ranks fifth in the number and cost of such construction. The cities outranking St. Louis are New York, Chicago, Brooklyn and Philadelphia. It has always cago, Brooklyn and Philadelphia. It has always been characteristic of this city to build solidly for the future, since the city has always believed it had an assurance of growth which warranted doing so, and this conviction still abides with its pro-

gressive citizens.

Gordon Willis, of the Hunkim-Willis Lime & Cement Company, reports an excellent demand for all classes of building material. Labor troubles have been adjusted and there is no hindrance being experienced by contractors at present from that source. The company has been obliged to increase its working force over one-third since New Year's. Three more yards have been fitted up for handling material. Their Peerless brand of the Genevieve white lime is giving excellent satisfaction, and is being shipped to Colorado, Kansas and Texas. Mr. Willis regards the outlook for business this fall asbeing very good.

being very good.
Out on the Gravois Road, where in days of yore a man who from the commander of the army became the president of the United States might have came the president of the United States might have been seen hauling wood on this old turnpike, L. H. Tiemann is engaged in the building material busi-ness, and carries in his large warehouse, which is situated on the Missouri Pacific Railroad, a full assortment of all the requirements for this trade, including Red Ring, Atlas and Lehigh Portland ce-

ment. Glencoe lime, Blackmer and Post's sewer pipe ment, Giencoe lime, Blackmer and Fost's sewer pipe, flue lining, etc. There being no retailer of building material in his vicinity, Mr. Tiemann virtually has the monopoly of the business, and as this section of St. Louis is building up very rapidly, his trade is

steadily increasing.

The R. R. Davis Company, of Morrison, Ill., has been incorporated. Capital stock, \$60,000. Incorporators—J. W. Steiner, R. R. Davis and Frank L. Davis. The company will deal in cement, gravel fertilizers, horticultural, etc.

The Budd Construction Company, of Summit, Ill., has been incorporated. Capital stock, \$25,000. Incorporators—Isaac D. Budd, Cyrus W. Hoyt and Alfred J. Parker. The company will engage in gen-

eral contracting and construction.

The Meyer & Thomas Construction Company, of East St. Louis, Ill., has been incorporated. Capital stock, \$25,000. Incorporators—J. A. Meyer, E. A. Thomas and H. T. Ellis. The company will engage

Thomas and H. T. Ellis. The company will engage in general contracting and construction.

A. H. Craney, sales manager of the cement department of the Union Sand and Material Company, states that there is a heavy demand for Portland cement, both locally and throughout this section. Within a few days the Kansas City plant has booked a contract for 90,000 barrels, while a single St. Louis sale he has just made covers 35,000 barrels, the new congrete viaduet to be built at rels, for the new concrete viaduet to be built at Kingshighway. The company will also furnish all the sand and gravel required for this job. Upwards of \$2,500,000 will be expended by the city in the near future for large sewer work. Mr. Craney predicts another advance in the price of cement early in the fall.

In the Iall.

The Best Manufacturing Company, of Peoria, Ill., has been incorporated. Capital stock, \$40,000. Incorporators—Thomas A. Best, Charles R. Clarke and W. E. Look. The company will engage in manufacturing, construction and building business.

MEMPHIS RETAILERS.

Memphis, Tenn., July 16.—There is much construction work of every character going forward in Memphis and vicinity. There is quite an amount of paving and road work that is utilizing special materials. Rains for the first fifteen days in July have retarded operations somewhat out of doors, but the next sixty days promise to be very active.

The Fischer Lime & Cement Company has recently erected a new warehouse and contemplates in the near future erecting large buildings for its main business. The same will be along the Southern

ain business. The same will be along the Southern

Railway.

Two new freight depots will be erected in Memwest of the near future. These will be located just west of the new union station, and will cost in the neighborhood of \$100,000. The L. and N. R. R. and

neighborhood of \$100,000. The L and N. R. R. and the N., C. and St. L. R. R. are back of the projects. J. N. Falls and associates will erect a twelve-story office building on Front Street this fall.

The Chickasaw Building Company is the style of the corporation. C. Hunter Raine, Jos. Newburger and others are associated with Mr. Falls in the enterprise

The contract for the high school building at Dequeen, Ark., has been let to Mitchell & Franc, of Van Buren, Ark., for \$19,124.

BIRMINGHAM RETAILERS.

Birmingham, Ala., July 18.—Business conditions in the line of building materials have greatly improved since last month, although the erection of buildings is being greatly hampered by the continual rainy weather and the carpenters' strike. In addition to many small projects, large operations such as the building of Corey are furnishing a nice amount of business for all the parties concerned, and cement has made remarkable advances in prices.

in prices.
The Kirkpatrick Sand & Cement Company, cording to reports, has had a very successful month. They have furnished several carloads of sewer pipe and cement for the Corey construction work; in fact, it seems that almost every dealer and contractor in this city has received his share of the

The contracts for the Farmers' Cotton Oil Company's building, to be constructed at Avenue F and Eighteenth Street, at a cost of \$25,000, will soon be let.

The Young & Vann Supply Company will soon rect a \$12,000 warehouse on First Avenue and

Eighteenth Street.

The strike of the carpenters has caused much discomfiture to local contractors, many of whom were forced to cease operations. The carpenters demand 45 cents an hour and a half holiday on Saturdays with full pay, but the contractors positively refuse

to make any concessions, and as a result work will not be resumed until the employers succeed in im-

porting nonunion labor.
C. E. Bostick has received the contract for the erection of the new South Side Baptist church on Eleventh Avenue and South Nineteenth Street, to \$63,000.

Another new church to be erected is the Walker Memorial Church, on the corner of Arlington and Tuskaloosa Avenues, Elyton. When completed the

Mr. Walker, of the Standard Portland Cement Company, reports that in spite of the inclement weather business has been fair. This company has sold a large amount of sand during the month for

Corey construction work.

J. T. McCants, of the same company, in answer to the question of what he thought of the cement

market, made the following reply:

"The demand for Portland cement throughout the South has been enormous for the past ninety days, and material advances have been made all along the line. Still further advances are anticipated in the line. Still further advances are anticipated in the near future. The next five months promise to be record breakers in the consumption of cement, and few orders are being taken for long time delivery at the present high prices. A very large amount of important work is in sight for the fall months, and, in fact, all over the South large quantities will be in demand. We are very optimistic concerning the future, for prospects of renewed activity are very bright."

The Alabama Great Southern Railway Company

e very bright."
The Alabama Great Southern Railway Company ill soon erect a new station at Tuscaloosa, Ala.,

at a cost of \$30,000.

KANSAS CITY RETAILERS.

Kansas City, Mo., July 18.—The crops in the surrounding country are in good shape. The wheat is harvested and is making a better crop than was expected. Oats is a good crop this year in this territory, and corn looks good to this time, and will be a fine crop if there is plenty of rain for the next month. Farmers are very busy at this time next month. Farmers are very busy at this time laying their corn by, putting up hay, etc., but should soon be able to begin the ordinary farm building and repair work which usually is taken care of in

and repair work which usually is taken care or in the fall and early winter months. Building material dealers are generally reporting business slow in their line. They state that busi-ness is dull both in the country and in the city. Retailers are not getting rid of the stock on hand. and so they are not ordering again in the country, and inducements do not tempt them to buy, either

in the way of special terms or special discounts.

The Builders' Material Supply Company, with offices at 301-5 Scarritt Building, has purchased 35,000 square feet of switch property at Twenty-fifth and Genesee, and will erect a warehouse

TOLEDO RETAILERS.

Toledo, O., July 19 .- The local builders' supply companies are enjoying a fair volume of business at the present time. The midsummer dullness is seemingly lighter than usual, and while business is confined to serving small jobs, the number of these more than make up what the larger ones might produce. There is only one complaint which any of the supply companies make, and that is that there are more supply companies in Toledo than the business warrants.

A. R. Kuhlman, of the Toledo Builders' Supply

Company, states that his firm has served fewer large jobs than usual this season, but that neverthe-less business is ahead of last season. The largest less business is ahead of last season. The largest jobs now being supplied with material are the new



OFFICE OF MONTGOMERY LIME & CEMENT COM-PANY, MONTGOMERY, ALA.

store building for the Tiedtke Brothers, the new postoffice building which is nearing completion, and the new factory building for the Overland Automo-

the new factory building for the Overland Automobile Company.

The Toledo Builders' Supply Company is the largest in the city operating six large yards, aside from having general offices on the fourth floor of the Spitzer Building. Of these yards, three are on either side of the Maumee River, which divides the city into what is known as the West and East sides. The yard on South St. Clair Street is devoted largely to sand and gravel, the yard being located along the banks of Swan creek, which afford a safe shelter the banks of Swan creek, which afford a safe shelter and harbor for the sand suckers operated by the company, and which secure their supply from the bottom of Lake Eric. The company here maintains large sand bins, from which sand can be dumped into wagons without shoveling. This yard is also utilized as a storage place for cement and pressed brick, but in smaller quantities, this special division of the husiness being controls are preticularly at brick, but in smaller quantities, this special division of the business being centered more particularly at the Cherry Street yard, located along the Wheeling and Lake Erie Railroad, and which, through its location, is near the Ann Arbor, Pere and Terminal railroads. Geographically, it is the most centrally located of all the company's yards, and its large storage sheds and buildings are given to handling such supplies as fire brick sawar sine and the like such supplies as fire brick, sewer pipe and the like, which are shipped to Toledo in large quantities. The yard located on Water Street near Adams

may be called the plaster yard, as here is located the plaster mill of the company, wherein is manufactured the Cresceus brand of hard wall plaster, and for which the company has built up an enviable reputation throughout the central West. Located on the banks of the Maumee river, all sand used in its manufacture is unloaded at the mill direct from the sand suckers, and this supply also serves as an immediate depot for such calls as come from the heart of the city.

The main yard on the East side is located on Main Street, near the east approach of the Cherry Main Street, near the east approach of the Cherry Street bridge. Here are the principal mortar beds of the company, although this division of the business is also given attention at both the Cherry Street and St. Clair Street yards. Here also the company has its coal yards and a smaller stock of coarser supplies. This yard has direct connection with the Ohio Central Railroad. The yard of South East Toledo is situated along the Pennsylvania Railroad, and serves a large manufacturing communication. East Toledo is situated along the Pennsylvania Railroad, and serves a large manufacturing community as well as Rossford, a village of some size directly outside the city limits of Toledo. The sixth yard is on Consaul Street, and is so located

sixth yard is on Consaul Street, and is so located as to serve a very scattered section in East Toledo and Ironville, a suburb of Toledo some seven or eight miles from the business section. Some months ago the company installed concrete block machinery, and has added that department to its business. The Superior Supply Company, organized early this year and which has since purchased the business of the People's Builders' Supply Company, has moved its offices to the Thirteenth floor of the Nicholas Building, where it is now located with the Woodville Lime Company, that company having purchased a portion of the stock of the new concern. Claud Smith, manager of city sales, states that the purchased a portion of the stock of the new concern. Claud Smith, manager of city sales, states that the business of the first six months has been beyond expectation. The company's yard is located on Water street, directly north of the Cherry Street bridge, whereby it has direct connection with the Maumee River, and which gives it immediate delivery for its sand. It is also located on the Merchants' Railroad, a short line maintained by and for manufacturers along the water front. Operations on this road are allowed only after working hours, but as prompt service is given, little is lost thereby.

The Toledo Builders' Exchange will hold its annual outing early in August, the exact place, however, not yet having been decided upon. The Exchange has made a number of changes in its quarters and also in its tenants.

ters and also in its tenants.

ters and also in its tenants.
S. J. Pickett, general contractor, has moved into the offices formerly occupied by Morgan Sheehy, whose death some time ago removed one of the best known contractors in the city.

The recreation rooms of the Exchange have been enlarged, redecorated and several new tenants have taken offices on the floor of the Exchange.

TWIN CITY RETAILERS.

Minneapolis, Minn., July 18.—The building season is at the midsummer period of hesitancy as regards new work until it is apparent what the commercial and industrial situation will be for fall. And the present indications are for a shortened commercial account hid fall. The control of the fall mercial season this fall. The crop of grain, upon which the commerce of the Northwest rests to a great extent, has been seriously damaged by the drouth and the hot weather. The state of North

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Dakota has had its yield cut in half, perhaps, and Minnesota has been affected to some extent, as well as South Dakota. A reduction of from 80,000,well as South Dakota. A reduction of from S0,000,000 000 to 90,000,000 bushels is now anticipated. What grain is harvested will command a better price, which will in some measure offset the damage, but there will be a shortened commercial and industrial activity in the Northwest because of the fact.

On the other hand, it is quite probable that the harvest will show that there has been a greater recovery from the late rains than was anticipated, covery from the late rains than was anticipated, and there will be a better crop than can now be expected. The net effect will be to hold down on the specualtion in land and the purchase of luxuries, such as automobiles and other things, which cost much money. But the net effect will certainly be to discourage more or less work which has been projected until later in the season. There is a great deal of work under way which will be carried on, and some just being started which will also be taken on. But there will be a partial cessation of new work, unless it speedily develops that there is a better crop back than now looks to be the case.

So far, conditions through the year have been active. Cement has been in steady and active demand, and prices have been steadily maintained. The demand for cement this summer has been probably heavier than ever before, owing to the heavy calls for it for new construction work, and the numerous uses of it for constructing dams, for street railway work, for the construction of dams, railroad work, and numerous other applications of it.

A. I. Marshall, a pigneer contractor of Minneano-

A. L. Marshall, a pioneer contractor of Minneapolis, died recently, of apoplexy. He has been poorly for four years, since sustaining a stroke of apoplexy. A widow and one son survive him.

In a recent address to real estate men, in convention in Minneapolis, Governor A. O. Eberhart en-dorsed a building line law, for residential districts, whereby no one should be permitted to build closer to the street than the designated distance. There have been such laws in Minnesota in the past, but a recent codification of the laws resulted in this being omitted, and there is now no restriction.

Building permits for June in St. Paul show a falling off from the previous year, the total being \$902,971 for this past month, against \$1,709,198 for June of 1909.

REPORTS HEAVY DEMAND.

REPORTS HEAVY DEMAND.

Detroit, Mich., July 18.—The C. H. Little Company reports a heavy demand for building material. Detroit and the adjoining territory have been doing considerable building this spring and summer. A large amount of reinforced concrete construction is going on now in Detroit. Mr. Little entered the builders' supply business in 1856 with Frederick B. Sibley, gaining an interest in the business in 1866, when the firm became F. B. Sibley & Co. In 1887 Mr. Little purchased the interests of Mr. Sibley, and in 1898 the C. H. Little Company was formed, taking over the sand business of Charles Heiden. An important change in the management was made An important change in the management was made a few years ago, when C. N. Ray, founder and president of the Ray Chemical Company, assumed the general management of the C. H. Little Company. Today the company occupies offices in the Penobscot Building, said to be the most elegant suite in America devoted exclusively to this class of business. The number of employees, which about two years ago was 300, has now increased to nearly 600.

nearly 600.

At the present time the company maintains seven yards or distributing stations in the city, so located as to reduce the length of hauls to the minimum. It is said that a haul of more than two miles, with the present system of stations, is very rare. Gravity loaders are made use of in these stations, which greatly simplify the work of loading. At the sand and gravel pits of the company, located at Utica and Rochester, modern devices and machinery load three to five sand boats or "sandsuckers" daily, which deliver 400 to 700 yards of material each.

About four years are the company completed

About four years ago the company completed additions to its plaster mill, which now has a capacity of 150 tons per day, and is one of the largest plants of its kind in the central states. The Little Company uses the entire output of the Dunbar Stone Company, located at River Rouge, and also uses the products of the Monroe Stone Company at Monroe, Mich.

Conlon & Co., of Jersey City, N. J., has been in-corporated with capital stock of \$25,000 for the pur-pose of manufacturing brick, lime, cement, lath, nails, etc. The incorporators are Charles W. Rocegno, Mary E. Conlon and Ralph H. Perry.

COST SYSTEMS.

Various Opinions Gleaned from Prominent Retailers of Builders' Supplies on the Subject of Handling and Delivering Supplies and the Cost of the Same.

In trying to determine the best method of handling builders' supplies we are confronted with local conditions which govern the matter to a considerable extent. In answer to numerous letters written to builders' supply dealers, we find that a great many of them have no method of keeping cost accounts which they consider worthy of mention

Quoting from some of the letters received, but not mentioning any names, one firm says: "We are not in position to give you our method of accounting for the cost of handling at the warehouse and delivery. We have not found a satisfactory way of keeping the cost, and are one of those who would like to have suggestions, but unfortunately have none to offer."

Another letter says: "Beg to say that we are not in position to furnish you with any forms or anything of that character."

Still another letter says: "I am afraid our concern is too old fashioned to carry the cost system in an up-to-date manner. The only uncertain quantity in our business is the handling in the warehouses. The way we arrive at this is to take warehouses. The way we arrive at this is to take the total of the rents, interest, labor, insurance, etc., deducting the tonnage that passes through the etc., deducting the tonnage that passes through the warehouses, and apportioning the cost of each item in that manner. As to our cost of delivery, we use a truckman, and have a scheduled rate for each delivery, the same as the freight rate. We would be very glad to get the result of your canvass on this subject, as we have no doubt that we are much behind the times in this matter.''

Quoting from another letter, the writer says: "Our cost system is made up from the various expense accounts as recorded in our books and copied into a bound book, and covers all the departments

pense accounts as recorded in our books and copied into a bound book, and covers all the departments of our business. We know that many of the larger dealers use forms for making up their costs, as well as their stock account, but we have not as yet found it expedient to adopt any forms of that nature, but are still using bound books for our coal tonnage, comparative statement of sales and cost of handling materials, as well as the distribution of overhead charges."

Another prominent builder supply dealer says: "We are very much ashamed to admit we have no cost system—in fact, taken as a whole, the building material dealers pay very little attention to modern office methods, and we feel sure that your missionary work in this direction will be appreciated by the trade. We believe that we have a very good

the trade. We believe that we have a very good system of checking in-bound and out-bound supplies, and one which we believe is original with us."

Another correspondent says: "We have no form

and one which we believe is original with us."

Another correspondent says: "We have no form as to cost system, but have been thinking recently of getting up some form of this kind, and would be pleased if you will let us have someone else's ideas along this line."

Quoting from another letter, the writer says: "Now, in reference to cost methods, I am ashamed to acknowledge that outside of our paring humans.

to acknowledge that outside of our paving business we have no cost data on the material we handle. We have attempted at various times to get up a cost system of handling our material, and in casting about for a system we found that even the larger companies keep no record whatever. This does not signify, however, that it is not necessary. The writer has realized for years that there is only one way to run a retail business, and that is along the same lines that a successful manufacturing plant same lines that a successful manufacturing plant would be run. If you are able to unearth a system, we would like very much to see what it is like, and if submitted to us, we will see whether it could be applied to our business or not."

Another prominent dealer gives his ideas, which are very interesting indeed, and we quote them in full: "The cost system in the building supply business we find a very hard proposition, and, at the very best, can only get an approximate estimate at any time. You probably are aware of the fact that we handle everything in the building line, with the exception of lumber, and in so far as lumber is concerned, we handle lath. Our method for ac-counting for the supplies, the cost of handling in the warehouse, etc., is necessarily on the sliding scale. In the first place, we are confronted with the fact that the cost of handling building supplies changes from day to day, so that we are practically figuring at random nearly all the time. The only way I have been able to get this in a sort of sy tematic way is by taking each line separately—for tematic way is by taking each line separately—for instance, cement; we figure that it costs us, on the average, 10 cents per barrel to deliver cement, and it costs us another 10 cents per barrel to get the cement into the warehouse, handle the accounts, take care of the empty bags, prepaid freight, etc. This, of course, is a very high figure, but on the whole is as accurate as you can get it. When we get down to lath, we figure that it costs us 50 cents are thousand of forty purples to get them. get down to lath, we figure that it costs us 50 cents per thousand of forty bundles to get them off the car and deliver them. Along these lines we figure and estimate everything we handle, with the exception of our specialties, which must necessarily be handled at a greater margin, and we figure that the cost of getting an article introduced is about the only expense outside the little expense incurred in handling, which amounts to little or nothing. To get right down to the cost of delivering goods we must necessarily start at the cost of keeping To get right down to the cost of delivering goods we must necessarily start at the cost of keeping our horses, the wages paid our teamsters, the warehouse expenses and the selling expenses, which, all totalled up in a grand total, would give what it costs us to send out a team of horses, on an average, including all these expenses. We have a certain costs us to send out a team of horses, on an average, including all these expenses. We have a certain number of teams, and are very nearly always in a position to know just what it costs us to run these teams, each day by the year. Whether they are hired teams of teams of our own, it comes out about the same. If there is any other information I can give you on this, I shall be very glad to do so. However, we are all willing to learn, and the seventeen years I have been in business it has been absolutely impossible for me to account for the cost of handling material in any way much different than we have been doing.'?

Quoting from another interesting letter, received from a large eastern builders' supply firm, they say:

Quoting from another interesting letter, received from a large eastern builders' supply firm, they say: "We have no printed form that we use in keeping account of the expense of handling our materials, but we do keep a close watch on that part of the business. In putting the material it the shed from the car or boat, we usually employ extra men by the hour, a separate gang for each lot, so we know the extra cost of handling exercises and restricted. the hour, a separate gang for each lot, so we know the extra cost of handling every car or boat load put in. The cost of delivery to the building is figured according to the distance and the number of loads made by our truck. We also hire some trucks and have a schedule of prices with the truckmen each kind of material for delivery to specified points. Our yard men are regularly employed. They help the drivers load. That expense is divided in proportion to the average amount of material of the various kinds sent out. The invoice books show the average lots of material as received. The

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STABLE RECORD THE BUILDER'S SUPPLY CO. ST DATE LIGHT DOUBLE

inventory book it written up once a week, so that we have a record of the material on hand."

A prominent southern supply dealer says: "We separate in our books the different items of expense and put our drayage and warehouse expense in one heading. We do not attempt to keep a separate account, for instance, with purely the matter of drayage, nor do we separate the labor in the warehouse from the other items connected therewith. We, of course, keep a stock record of what goes in and out of the warehouse to check against our books in the office, and we have a semiannual audit made by an independent auditor to check the results."

A prominent Ohio builders' supply concern says: A prominent Ohio builders' supply concern says:
"I am frank when I say to you that we would be very glad to furnish you with a cost system if we were in position to do so, but our business is so very different from most of the builders' supply dealers that it would be of little use to them, owing to the fact that we handle grain; feed and flour, and the different commodities are not handled so that we could give you information that would be of any value to you. For instance, we have five so that we could give you information that would be of any value to you. For instance, we have five yards, and 90 per cent of our cement is delivered from one yard. All cloth bags returned, whether cement went from this yard or not, are all returned to this yard. Flour is delivered from this same warehouse. Grain and feed orders are delivered from Yard A. I have a report on my desk for the cost of delivery from our different yards on a tonnage basis. This cost runs from 38 cents per ton at one yard to \$1.09 per ton at another yard, so that any information I would be able to give you would be of no value to you on this account.''

would be of no value to you on this account."

One of our prominent Canadian subscribers says:
"We would like to get in touch with some some progressive, up-to-date dealers with a view to exchanging ideas as to system of cost, etc. Perhaps you have published, at some time, in your paper a cost system for builders' supply firms. If you have not done this, would it be possible to offer parties some inducement for preparing a system of costs for builders' supply firms? What we want to get particularly is a system of cost for warehouse, yard, delivery of material, and at the same time a cost system for handling mixing plants, calcining plaster system for handling mixing plants, calcining plaster mills, crushed stone plant and sand operations. We would feel disposed to contribute a small amount towards a competition of this kind, and would like to hear from you in the matter."

prominent Wisconsin builders' supply dealer writes as follows: "We have no special printed forms except our delivery tickets, and these are about the same as used by all concerns, but we have a system that is very simple and about one-third the work of most bookkeeping, and not only have a system that is very simple and about one-third the work of most bookkeeping, and not only shows us our net profits for the day, but it also shows on what commodities we are making the profit. I attach a synopsis of our system: We take the delivery tickets for the day (a delivery ticket is made for each transaction), figure charges on each ticket; we use these tickets in place of a day book, file them in a case similar to a card index case. Our different commodities are taken from these tickets to show the total quantity and receipts for each. The total of each commodity for the day is entered i na journal (6 column)—first column quantity, second receipts, third cost. The day's business footed, showing total receipts and cost; this will occupy three columns—in the fourth show gross profit, in the fifth expenses for the day and in the sixth net profits. At the end of the month make a receiptulation, showing total receipts, cost and gross profit for the month of each of the principal commodities; those not important bunch together as miscellaneous. At the end of the year you can ascertain the gross profit on each commodity. The ledger entries are made from the delivery tickets and proven, when the total of entries agrees with the total of the day's business in the journal."

Quoting from another very prominent builders' supply firm, they say: "I have also postponed responding to your letter, thinking you could possibly receive a great deal more information from some of the older builders' supply men, but inasmuch as you desire an outline of our system, I will endeavor to compute the same daying the writter. much as you desire an outline of our system, I will endeavor to compute the same during the winter months, as I also have two or three inquiries from other concerns which I have been putting off from time to time. I am very much interested in your system for assisting the various builders' supply dealers throughout the country to ascertain more closely their exact profit in delivering material, but, for your information will see that so matter here. for your information, will say that no matter how good a system that might be installed in a company, it would fall very flat if not executed properly. It seems rather a broad statement to make, yet there are a number of people who just as soon as this would show up their losses would probably throw it cut, condemning it. There are still several people, in this business as well as others, who have gotten so used to fooling others that they invariably fool themselves."

ANDREWS LUMBER COMPANY.

Paxton, Ill., July 19.—The Andrews Lumber Company, one of the oldest dealers in builders' supplies here, has recently built an office and shed 150 feet by 160 feet. It contains two large office rooms, sash and door rooms, cement, lime and plaster rooms, and in addition has a capacity for storing about 2,000,000 feet of lumber.

The building was designed by George M. Turner, of the firm of H. & G. Turner, contractors, of this city. The entire building is constructed of concrete blocks, made in a Hercules block machine, manufactured by the Century Cement Machine Company, of Rochester, N. Y.

The cost of the building was approximately \$8,000. This building has attracted considerable attention, as it is one of the first of its kind ever built in this country. It is especially appropriate that a build-

country. It is especially appropriate that a build-ers' supply firm should have a building of this char-acter, combining, as it does, the latest features of warehouse construction, besides being fire proof and effecting a saving in insurance.

Bulletin No. 24, recently published by the Association of Portland Cement Manufacturers, Land Title Building, Philadelphia, Pa., is on the subject of "Reinforced Concrete for Houses," by Benjamin A. Homes. This paper was read before the association at the annual meeting last December. It is profusely illustrated and is one of the most comprehensive and best written articles on the subject that has ever been promulated. ject that has ever been promulgated.

A GOOD SYSTEM EXPLAINED.

We are showing in this issue some forms used by we are snowing in this issue some forms used by one of the largest eastern builders' supply houses in this country. They are comprehensive and, while they apply to a business of great magnitude, can be adapted to a smaller sized business to great profit. In submitting this data this company says: "We are submitting blank forms which we use in collecting data for figuring the cost of handling materials in the various ways which we are required to deliver. Our pay rolls are made up from the original time sheet, which distributes the time of each man according to the kind of labor he may have performed during the day. If it becomes necessary to shift a man from one kind of employment to another, it is easily done, as the total of the day's work is carried out under the total time and the sheet is only used to cover that period. Our teaming costs are made up from the team record, which covers the employment of not only our own teams, but those which we one of the largest eastern builders' supply houses in this country. They are comprehensive and, while ment of not only our own teams, but those which we hire from other owners. This record does not show on the blank, the kind of material which each team would bank, but we use a system of letters together with ticket numbers, which enables us to keep up an absolutely accurate account of the number of tons of each kind of material delivered and the team time accessary to effect such deliveries. We keep an ac-curate tonnage of both inbound and outbound of all kinds of material, but as this is kept in a book it is impossible for us to send you a blank, but we enclose you a blank for the temporary tonnage record, which is made up each day from our triplicate delivery tickets, the total afterwards being transferred to the book? book.

THOUGHTS FOR THE WORKER.

Be alive all the time, and especially when you

work. Enthusiasm creates energy.

The honest worker demands more of himself than his employer ever expects of him.

However poor your work is, it is never hopeless.

You are a success if you make it a little better

the day.

The best remedy for failure is plenty of hard,

conscientious work.

Think success, but that is not enough; think it so hard that it becomes action.—Chicago Tribune.

The Builders' Marble Works has been The Builders' Marble Works has been incorporated in New York City, with a capital stock of \$50,000, to quarry and deal in stone, marble and building materials. Incorporators: F. H. Smith, Nutley, N. J.; J. V. H. Hayes, H. M. Leavitt, New



OFFICE AND WAREHOUSE OF THE ANDREWS LUMBER COMPANY, AT PAXTON, ILL., BUILT OF CONCRETE BLOCKS.

JUI



THE CEMENT SITUATION.

Cement has taken on a decidedly firmer tone, though this is the season of the year when the mand usually drops off, the reports received from various trade centers indicate that there has been little, if any, cessation, and the probability is that the demand will keep steady throughout the summer

The price of cement has steadily advanced in the West and South, and last week an advanced in the West and South, and last week an advance of 10c per barrel was made in New York and the East. A quotation along side in quantities of 250 barrels or more is \$1.53; Rosendale is still quoted at 80c. This is the most convincing indication of a stronger

The prices of the German brands are unchanged. The prices of the German brands are unchanged. Albert Moyer, manager of sales of the Vulcanite Portland Cement Company, in commenting on the situation, said: "I do not only look for the present prices to be fully sustained by the improved demand, but I also look for a still further advance. It is unquestionably due to the greater demand for Portland cement. This demand does not necessarily imply that building conditions are any better in this district, but to the natural result of increased smaller users of the product. The campaign of education that has been conducted by the cement smaller users of the product. The campaign of education that has been conducted by the cement companies has produced a larger consumption not only in cities and towns but on the farms. While business in the cities is not what it should be, all the mills are running full tilt to supply the small orders that are coming in from every conceivable part of the East. The western districts report the same conditions."

The advance in the price of cement has been anticipated for some time; in fact, the manufacturers have predicted it all along. When the unusual demand first began in the spring, the cement manufacturers were inclined to think it was but a temporary movement and were somewhat timid about asking the price for fear of cutting off the business, but as time went on the demand not only increased, but assumed huge proportions, until now practically every cement mill in this country is running full time trying to keep abreast with the orders. One of the earliest indications of a stronger market was the fact that early in the spring manufacturers refused to enter into long-time contracts at a fixed price. This was the first effect of the improved demand. Many large builders' supply dealers took the hiat and laid in large quantities of cement. ROCK PRODUCTS at that time advised its readers to lay in a stock in order to take care of the demand which was then starting in in earnest. Some The advance in the price of cement has been an

mand which was then starting in in earnest. Some of the retailers who are now clamoring for cement in order to fill their orders have no one to blame but

This increased demand is all the more remarkable In view of the fact that the railroads are not as yet using their full quota of cement, and the chances are that the demand will be still greater as the season

WANT LOWER CEMENT RATES.

Washington, D. C., July 15.—Eleven cement companies in Michigan, Indiana and Ohio today comwashington, D. C., July 15.—Eleven cement companies in Michigan, Indiana and Ohio today complained to the Interstate Commerce Commission of the rates on Portland Cement in the Central Freight Association territory. The complaint is noted in that it was filed only a day or so before the commission is scheduled to take under consideration the freight advances in the Central Freight and Trunk Line territories, which take effect August 1.

The complaint alleges that the rates given in the Central Freight Association territory are unjust in comparison to the rates on Portland cement from the Trunk Line Association territory to Central Freight Association territory. The complainants ask for a uniform system of rates and a commodity rate on Portland cement.

It is stated that their shipments approximate \$1,000,000 annually on the manufactured article and about \$500,000 on the raw material. The complainants are the Elk Lime & Cement Company, Elk Rapids, Mich.; the Hecla Company, Bay City, Mich.;

planants are the Elk Lime & Cement Company, Elk Rapids, Mich.; the Hecla Company, Bay City, Mich.; Huron Portland Cement Company, Alpena, Mich.; New Aetna Portland Cement Company, Fenton, Mich.; Newaygo Portland Cement Company, Newaygo, Mich.; Omega Portland Cement Company, Jonesville, Mich.; Peninsular Portland Cement Company, Cement City, Mich.; Sandusky Portland Ce

ment Company, Bayridge, Ohio; Wabash Portland Cement Company, Stroh, Ind.; Wolverine Portland Cement Company, Quincy and Coldwater, Mich.; and the Wyandotte Portland Cement Company, Wyandotte, Mich.

F. H. SIMPSON MAKES A CHANGE.

Des Moines, Iowa, July 15.—F. H. Simpson, of the N. M. Stark Bridge Company, has resigned his position with this firm and will go to South Dakota, where he has accepted a position with the Dakota Portland Cement Company.

LARGE VOLUME OF BUSINESS.

Birmingham, Ala., July 18.—The Standard Portland Cement Company, with sales offices in the Brown Marx Building, Birmingham, Ala., in charge of J. I. McCants, sales manager, is doing a large volume of business this year. Some of the contracts taken in the past six months were 50,000 barrels for the Tennessee Coal, Iron & Railroad Company, Ensley, the Tennessee Coal, Iron & Railroad Company, Ensley, Ala.; 30,000 barrels for construction of a large hydro electric plant at Columbus, Ga.; 25,000 barrels for street paving at Pensacola, Fla.; 25,000 barrels for sidewalks at West End, Ala.; 10,000 barrels for sidewalks at Ensley, Ala.; 5,000 barrels for coke ovens, at Woodward, Ala.; 10,000 for street improvements, at Tuscaloosa, Ala.; 4,000 barrels for the Tri-State Hospital, Memphis, Tenn.; 4,000 barrels for the home of the Atlanta Journal, Atlanta, Ga.; 4,000 barrels for the Capital City Club, at Atlanta, Ga.; 6,000 barrels the Capital City Club, at Atlanta, Ga.; 6,000 barrels street paving, at Jackson, Miss.

The plant of the Standard Portland Cement Com-



J. I. McCANTS, MGR. OF SALES, STANDARD PORT-LAND CEMENT COMPANY, BIRMINGHAM, ALA

pany is located at Leeds, Ala., about seventeen miles east of Birmingham on lines of the Southern and Central of Georgia Railways. The plant has been in operation now for about four years and its product has been used in some of the most important structures in the South. Mr. McCants, sales manager of the company, who is located in Birmingham, has had considerable experience in marketing cement throughout the South and has a host of friends among the trade. Mr. McCants is originally from Charleston, S. C., from which place a number of others have embarked into the cement industry.

CONSIDERABLE ADVANCE IN PRICE.

Philadelphia, Pa., July 19.—The William G. Har-tranft Company, sole selling agent of the Virginia Portland cement, Phoenix Portland cement and the Penn-Allen Portland cement, with offices in the Real

Fenn-Alien Portland cement, with omices in the Real Estate Trust Building, make the following comments on the situation:

"While the production of Portland cement has increased very materially, the capacity of the mills is 25 per cent in excess of the consumption. The growth in the use of cement to small users has en so phenomenal during the past two years that ices have strengthened very materially. The large prices have strengthened very materially. The large eastern factories, who have been shipping south and west below cost of production for two years, in order to keep their plants running, have discontinued this method of doing business and there has consequently been an advance in price, in some cases as much as 30c per barrel, and there is the prospect of brighter days for the cement industry."

PROSPECTS NEVER WERE BETTER

Ada, Okla., July 19.—Adam L. Besk, president of the Oklahoma Portland Cement Company, in com-menting on the situation, has the following to say: "We are doing a very nice business, and pros-pects never were better to finish out a good round

"The crop prospects never were brighter than they are now. In fact, this country has been blessed with a large production of wheat, oats and hay, that have already been harvested, together with all that have already been harvested, together with all manner of small fruits and vegetables. The corn is practically matured in this section, and will be a bumper crop. Cotton never looked better, and the weather conditions are ideal for a large cotton production. In fact, cotton in my section is in bloom, and will be ready to harvest by September 1. The above condition will naturally make an ideal market for the believe of this year, bringing a great

above condition will naturally make an ideal market for the balance of this year, bringing a great deal of money to this territory.

"In regard to our shipments, will say that There is nothing rushing. We are able to keep up with our orders, and make prompt shipments. Am also pleased to say that we are running our plant to its full capacity of 2,000 barrels per day. Prices are fair, and would not be surprised if the demand this fall would cause a temporary increase in price. We are furnishing cement on quite a number of first class jobs in Oklahoma City, Fort Worth and San Antonio."

INSTALLS CENTRIFUGAL PUMP.

El Paso, Tex., July 16.—The Southwestern Portland Cement Company has recently ordered an 8-inch cen-trifugal pump direct connected to an induction motor from the Allis-Chalmers Company. The installation of this set will be particularly interesting because of local conditions.

Power will be transmitted to the motor, which will be controlled from the plant about 1½ miles from the location of the motor. Current is generated at 480 volts and stepped up to 2,200 volts for transmission over an existing line. The motor will operate at about

The pump will deliver about 2,000 gallons per minute, against a total head of 80 feet, to a reservoir which supplies the plant. A 10-inch riveted steel pipe connects the pump to the reservoir.

INCREASING CAPACITY OF POWER HOUSE.

Chanute, Kan., July 18.—The Ash Grove Lime & Portland Cement Company, which has a cement plant here and several lime plants in Missouri, is increasing the capacity of its power house. When the plant was built the company installed four Allis-Chalmers 22x42 simple engines. It has recently ordered a 46x42 low pressure engine from the same builders, which will serve as a low pressure side of a cross compound en-gine of which one of the old engines will serve as the high pressure side. The new low pressure engine will be supplied with a rope drive wheel, duplicate of the one now on high pressure engine, in order to transmit the additional power generated.

REORGANIZATION PROPOSED.

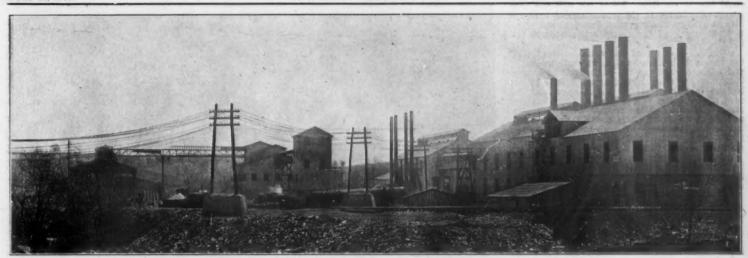
New York, N. Y., July 18.—George A. Beaton, former private secretary of former Senator Foraker, holder of \$1,036,000 of the bonds of the Seaboard Portland Cement Company, requested Judge Ward in the United States circuit court at New York not to make a temporary receivership permanent. As a substi-tute a reorganization plan was proposed by which the tute a reorganization plan was proposed by which the stockholders were to tear up their stock as so much worthless paper, and the bondholders, largely the same people, to put the unfinished plant on the Hudson River in the hands of a committee of five, with power to complete and operate it. Judge Ward agreed that this was the most practicable way out of the tangle in which the company finds itself.

MARQUETTE MAKES LIBERAL DISTRIBUTION.

BUTION.

Ottawa, Ill., July 18.—The Marquette Cement Manufecturing Company, July 1, distributed \$6,000 in bonus and premiums to its employees. This is a semi-annual premium and bonus distribution which this company has been making for several years. This premium was paid to such employees in the operating department, as have been in the service of this company since January 1, 1910, and all such employees were given a share of same in recognition of good work, interest and co-operation shown by them. This company is to be commended for the square deal given to its employees at all times. square deal given to its employees at all times

The Raymond Bros. Impact Pulverizer Company recently closed a contract with the Clinchfield Portland Cement Company for two of their No. 4 roller mills for their new plant now being erected at Kings-port, Tenn.



GENERAL VIEW OF THE PLANT OF THE ALLENTOWN PORTLAND CEMENTS COMPANY, READING, PA

MATCHAM BRAND.

The Allentown Portland Cement Company's New Mill Combines Many Modern Ideas.

"Matcham Brand" is the name of the cement which is being manufactured at the newest mill in the Eastern district, and, as the name implies, it is the Allentown Portland Cement Company's, of which Charles A. Matcham is the general manager.

As most of our readers know, Mr. Matcham has designed and built a number of the best cement mills both East and West, and this, his most recent effort, he says is better than any of the rest.

he says is better than any of the rest.

The mill is located at Evansville, Berks county, Pennsylvania, the main office and sales department being located at Allentown, in the Allentown National Bank building. The entire mill has been constructed under the personal supervision of Mr. Matcham and by the Fuller Engineering Company.

P. B. Beery, well and favorably known in the cement trade, is sales manager of the "Matcham" brand, which itself commands a favorable introduction.

Herewith we present to our readers several feature views of the plant. The power house is about 1,000 feet from the plant and consists of three engines of 1,000 horsepower each, Cross compound condensing and direct connected to Westinghouse generators, the boilers being equipped with automatic stokers. From this generating set the entire plant is electrically

The cement rock as it comes from the quarry is

crushed with a No. 10½ McCully, which is followed by three No. 6½ Lehigh crushers. The raw material grinding room is equipped with Krupp Ball mills and Fuller-Lehigh pulverizers.

The kiln building has four 8 feet by 120 feet kilns, which are fired by the Matcham natural draft system, and the dryers obtain their fuel from the waste gases of these kilns.

The clinker or finished grinding room is equipped.

The clinker or finished grinding room is equipped with Krupp Ball mills for reducing the Fuller-Lehigh pulverizers and finishers. A large storage capacity for clinker is arranged so that upwards of 50,000 barrels of clinker can be taken care of at one grinding.

The cement stock house has a capacity of 100,000 The cement stock house has a capacity of 100,000 barrels, and the packing department is equipped with Bates valve packing machines. Throughout the plant great care has been taken for large storage capacity in each department, so that at no time can the plant be stopped for lack of material. The plant has been arranged to increase the capacity up to 5,000 barrels per day without interventing the present production.

arranged to increase the capacity up to 5,000 barrels per day without interrupting the present production of 2,500 barrels per day.

The mill has been located beside a rich and inexhaustible deposit of lime rock and cement rock, which is quarried and brought to the mill on a very economical basis, as cement plants go.

The buildings of the plant are constructed entirely of steel frames and concrete. Nearly 20,000 barrels of cement were used in its construction.

The mill was opened on May 1, 1910, and has

The mill was opened on May 1, 1910, and has already earned for itself a place in the trade, as its projectors, and operators are well and favorably known in the cement field both by users, dealers and others.

CEMENT STRONG IN CHICAGO.

CEMENT STRONG IN CHICAGO.

Chicago, July 19.—Bright as the outlook in the cement trade appeared last spring for a big business this year, present conditions were little dreamed of. An unabated heavy demand for cement this month was not expected. Prices have advanced steadily since early spring and are strong, showing an upward tendency. Stocks on hand at the mills throughout the country are lower than they were last year, having not much more than one month's supply in reserve. With large shipments of eastern cement coming into the western territory no effect has been felt on firmness of prices. While locally there was a slight lull in the demand the fore part of the month, it is again resuming its former strength and bids fair to tax the full capacity of the mills to supply the great quantities of cement the fall season will call for.

bids fair to tax the full capacity of the mins to supply the great quantities of cement the fall season will call for.

"We are facing conditions in the cement market wholly unexpected last spring, bright as they looked then," said Gold Williams of the Marquette Cement Manufacturing Company. "The demand is heavy, showing no indications of abatement. Stocks throughout the country are low and if this heavy demand keeps up, it will trouble us not to get swamped. Prices advanced last week. They are stiff and show an upward tendency. Everything looks bright and we expect a very active fall trade."

"Shipments are heavier and the demand for cement is greater this month than it was in June," said

"Shipments are heavier and the demand for coment is greater this month than it was in June," said Edward L. Cox, general sales agent of the German-American Cement Works. "We refuse to take large contracts, to insure taking care of our regular customers. Stocks are low and prices are stiff and may go higher before the year closes. It may be necessary for the Lehigh Valley to help supply the trade in this territory, a condition in the trade this season never dreamed of."

"There was a slight lull in the cement trade the

never dreamed of."

"There was a slight lull in the cement trade the

"There was a slight lull in the cement trade the fore part of this month, but the demand now is again as heavy as during the early months of spring," said B. F. Affleck, sales manager of the Universal Portland Cement Company. "Prices are stiff and show an upward tendency. Prices advanced last week in the East, which naturally affects the West. Stocks are low throughout the country and we are facing, from present indications, a continued heavy demand with the opening of the fall season."

Norman D. Fraser, president of the Chicago Fortland Cement Company, said, "The demand this month is rather light relatively and shipments are not heavy. This is due to the summer period when customers are on their vacation and farmers busy harvesting crops. On account of prices, which have been advancing steadily and are stiff, much eastern cement has come into this territory, without any effect on existing prices. I see a big demand and heavy business coming with the opening of the fall effect on existing prices. I see a big demand and heavy business coming with the opening of the fall

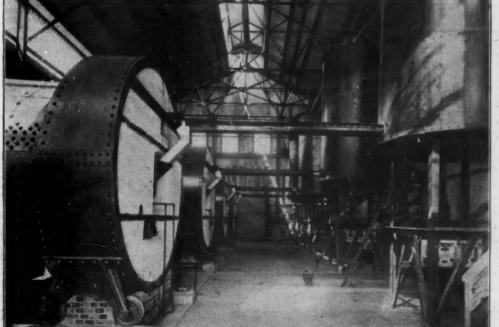
Season."

George W. DeSmet, distributor of Vulcanite Portland eement, said, "I have found no lull in business to far this month; everything is moving actively and smoothly. There are no indications of the demand falling off. Shipments are not quite as heavy as I

The Willis Shaw Machinery Company, Chicago, Ill., recently issued a little booklet entitled "Shaw's Booklet of Second-Hand Machinery." They say: "For fifteen 'years we have handled both new and second-hand machinery and contractors' equipment, and the name, Willis Shaw, is familiar to users of machinery all over the United States.

This is only a partial list, selected for our trade, requiring dependable goods.

MAMMOTH MCCULLY CRUSHER DRIVEN BY ELECTRIC MOTOR.



would like to see them. Prices are stiff and very strong. Conditions in the cement market have not been as good as at the present time for three years. It looks very good for a very active business this fall."

fall."

"Business is very good this month, although there has been a little bit of a lull, as usual in July," said John G. Evans of the Atlas Portland Cement Company. "We are increasing the volume of our business in Chicago nicely. Prices are strong and show no weakening with large quantities of eastern cement coming into this territory. Stocks are lower throughout the country this month than they were last year at this time. From all indications we will have a heavy demand and big business this coming season."

D. Richter, western manager of the Alpha Portland Cement Company, spoke of the conditions in the cement market in this way: "There is no falling off in the demand; it keeps right up to high water mark. Business is good and shipments are heavy. Stocks on hand at the mills throughout the country are lower than last year. Prices are very firm, in fact, strong, and there is a remote possibility that they may reach a higher level before the close of the year. Conditions have not been as bright in the cement trade for three years and the fall season bids fair to open with heavy demands which will tax the capacity of cement mills to supply."

KANSAS CITY CEMENT NEWS.

Kansas City, Mo., July 18—Cement manufacturers are generally reporting a good demand for their product, and state that the future looks goods to them, as cement is taking a constantly larger place in the list of building materials for all kinds of construction work, especially work of the larger kind, where great quantities of material are being

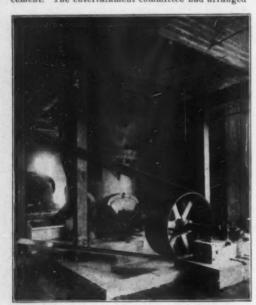
The manufacturers of common brick are complain-The manufacturers of common brick are complaining about a slow business now, the prices having dropped off to a point very close to cost of production during the past month. They blame the cement plants for part of their troubles, stating that cement is displacing common brick on all big jobs, and then they find there is a dropping off in all kinds of work, owing to the fact that loans are hard to get for building purposes and people have adopted a waiting policy all the way around.

Ivan de Mitkiewicz, assistant sales manager of the Western States Portland Cement Company, has resigned.

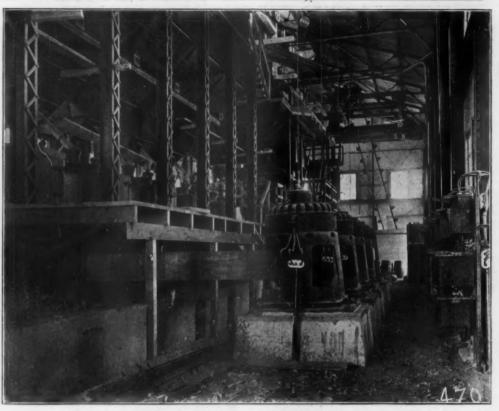
resigned.
The Monarch Portland Cement Company is re

The Monarch Portland Cement Company is reported to have purchased two large steam shovels, to be used in digging shale and loading rock at their plant in Humboldt, Kan.

A meeting of the Western Cement Manufacturers' Association was held at the Baltimore hotel in this city on June 12, the chief matter under discussion being the matter of publicity, and it was decided to adopt the policy outlined by the publicity committee, and do some effective advertising of cement as a building material in the West. This advertising will be of a general character, such as will benefit all producers and handlers of cement by increasing the demand for that material, and will not be done in the interest of any particular brand of cement. The entertainment committee had arranged



KILN DEPARTMENT, SHOWING METHOD OF INTRO-DUCING FUEL INTO THE KILN



BATTERY OF FULLER-LEHIGH MILLS, WITH WHICH THE MILL OF THE ALLENTOWN PORTLAND CEMENT COMPANY IS EQUIPPED IN BOTH ITS RAW AND FINISHED GRINDERS

ALLENTOWN PORTLAND CEM
IN BOTH ITS RAW AND
for a luncheon after the meeting, which was also
given at the Baltimore. The officers of this association are all Kansas City men: G. E. Nicholson,
president; W. B. Hill, vice-president; F. E. Tyler,
secretary, and A. Steinmetz, treasurer. The following out-of-town people attended the meeting: Whitney Newton, of the Portland Cement Company, of
Colorado, Denver; J. E. Zahn, secretary of the
United States Portland Cement Company, Denver;
F. H. Patterson, of the Fredonia Portland Cement
Company, Fredonia, Kan., and George L. Kice, of
the Oklahoma Portland Cement Company.
Referring to the complaint of the brick manufacturers that cement was reducing the demand for
common brick, W. B. Hill, of the Ash Grove Lime
& Portland Cement Company, said that it was his
opinion that the brick people would sell more brick
if they devoted their time to boosting their own
game than they will by knocking some other building material. He says that brick has plenty of
good qualities to advertise and if the brick people
will devote their energies in that direction and
merely ignore other lines of building material the
result will be an increase in the sale of brick, for
almost everyone likes a booster and very few people
like a knocker.

Thomas F. McClaren, formerly with the Western
States Portland Cement Company, has accepted the
position of sales manager for the Monarch Portland
Cement Company. Mr. McClaren is well known in
cement circles and is one of the strongest men in
this trade territory, if the word of his competitors
can be taken, and that ought to be a good source
of information.

According to the report of Henry McGrew, receiver for the Bonner Portland Cement Company,

According to the report of Henry McGrew, re-ceiver for the Bonner Portland Cement Company,

ceiver for the Bonner Portland Cement Company, the plant earned in June, above all expenses, the sum of \$8,496.21, the output for the month being 28,027 barrels. On this basis the plant is earning about \$105,000 per year and ought to pay off all of its indebtedness within about a year, if let alone. The Kansas City Portland Cement Works suffered a considerable fire loss last week, the building housing the crusher department having been destroyed. It was the only building in the plant not made of concrete, and was valued at about \$30,000, and contained machinery valued at some \$150,000. and contained machinery valued at some \$150,000, on which the damage is stated to have been about \$50,000. The building contained a No. 5 Austin crusher, four storage tanks for stone and shale, four belt conveyors above the tanks and one below, two rotary driers, three 65' elevators, one 100-horse-power meters and two swaller meters, one ower motor and two smaller motors.

The American Cement Company has declared the regular semi-annual dividend of 1 per cent.

PHILADELPHIA CEMENT NEWS.

Philadelphia, Pa., July 16.—Building operations are comparatively small in this vicinity. In the suburbs the building of residences still continues to be heavy, but there are very few large contracts being made.

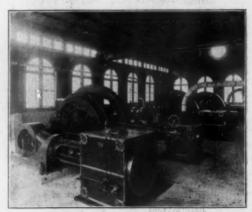
L. V. Clark, manager of the Lawrence Portland Cement Company, states that they have every rea-son to be contented with the business conditions outside of the local trade.

Henry Longcope, of the Alpha Portland Cement Company, reports they have been exceptionally busy during the past month.

APPOINTED SELLING AGENT.

Philadelphia, Pa., July 20.—The William G. Hartranft Cement Company will be the general selling agent of the Penn-Allen Cement Company, whose plant near Bath, Pa., has very recently resumed operations. William E. Erdell, who was manager for the past five years of the Penn-Allen Cement Company, is now the president. He has been associated with—the manufacture of Portland cement since the early eighties.

William G. Hartranft & Co. is one of the oldest selling companies in the business. William G. Hartranft, the president, became associated with the sale of American Portland cement when there was very little of it made in this country. Mr. Hartranft has been in the business for over thirty years.



POWER PLANT.

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JULY

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WEST COAST CEMENT NEWS.

San Francisco, Cal., July 16.—The demand for cement around San Francisco continues fairly active, and prices are firmly held at the recent advance. The demand is especially good in the interior, where some fairly large orders are being taken, though the general run of individual sales are rather small. In view of the numerous street improvement operations in Oregon and Washington, the demand in that territory is very strong, and an unusually large amount of California cement is being used there. Ship-ments are increasing all the time, the operations of the barge company recently formed to handle this traffic having proved highly successful.

The Standard Portland Cement Company is pre-

paring to put up a large steel frame drier building at Napa Junction, Cal.

EMPIRE PORTLAND CEMENT WORKS SOLD.

EMPIRE PORTLAND CEMENT WORKS SOLD. Syracuse, N. Y., July 18.—John B. Moorhead, of Franklin, Pa., and Edgar A. Puzzell, of Chicago, representing the largest bondholders, bid in the plant of the Empire Portland Cement Works, at Warner, when it was sold on mortgage foreclosure by Referee Joseph P. Murphy. The price paid was \$7,500, and a bond mortgage of \$125,000 covered the property. General Charles Miller was trustee of the bonds. The property will be disposed of as quickly as possible and the proceeds divided among the bondholders. The plant was established by Thomas Millen & Sons. It has been idle during the past year.

CEMENT BRICK IN UTAH.

Provo, Utah, July 19.—J. C. Jensen, who is operating a cement manufacturing plant here for the manufacture of cement building brick and decorative building material, has received an order for 60,000 brick for the new building of the Troy Steam Laundry in Salt Lake City.

INCREASE CAPITAL STOCK.

Richfield, Utah, July 20.—The Keene Cement Company has increased its capital stock from \$160,000 to \$250,000 and has added the manufacture of all kinds of marble to its industry.

WILL MAKE WHITE CEMENT.

Nazareth, Pa., July 20.—The Dexter Portland Cement Company has obtained an option on a tract of white clay land near Saylorsburg and will engage in the manufacture of white Portland cement. There are but few plants in this country at the present time manufacturing white cement and there is a great demand for it for ornamental purposes.

WILL ERECT PLANT.

Mason City, Neb., July 18.—The Lehigh Portland Cement Company has commenced work on the erection of a new plant, one mile northwest of this city. It is expected that this plant will have a capacity of 5,000 barrels of Portland cement per day. The cost of the construction is estimated to be between \$1,000,000 and \$2,000,000.

WILL BUILD STORAGE BUILDING.

Detroit, Mich., July 18.—The Huron Portland Cement Company has received a permit to erect a \$28,000 storage building at 445 Atwater Street. It will be built of reinforced concrete.

TO ERECT NEW ADDITION.

Chicago, Ill., July 20.—The directors of the German-American Portland Cement Company, whose plant is located at LaSalle, Ill., have commenced the erection of a new addition to their plant, including new kilns, which will cost, when complete,

Work on the new plant of the T, Millen Cement Company, of Syracuse, N. Y., which is being built at Jamesville, N. Y., is being pushed rapidly, and will probably be completed in the fall of next year. The plant will have a capacity of 1,000 barrels per day.

Arkansas City Portland Cement Company, which has a large plant at Arkansas City, has moved its general offices to Wichita, and is now comfortably located in a handsome suite of offices in the Winne

The Fairview Cement Company, of Fairview, Okla., has been incorporated with capital stock of \$100,000. The directors are M. E. and Henry France, John J. Nelson, Charles H. Albert and J. W. Colvin, all of Alva, Okla., and John L. Perkins, of Carmen.

OHIO RETAILERS.

Report Trade in Building Materials Very Brisk This Year and a Very Heavy Demand for Cement.

In Ohio dealers in builders' supplies are well pleased with the business they have landled this year. Weather conditions have been very favorable to building operation, which set in sooner than usual. There has been a surprising activity this year in all building lines, and a heavy demand for cement, including farming districts, indicating that more cement will be used in improvements on farms this year, which was supposed to have reached high this year, which was supposed to have reached high water mark last season. There is a general feeling of optimism throughout the state and every dealer looks for rushing times the coming fall in the builders' supply field.

MARION, O.

Marion, Ohio, has a number of large manufacturing establishments and lime-making plants, which enjoy an excellent reputation and have a large sale throughout the state for their product. These lime throughout the state for their product. These lime manufacturers have been obliged to start up their entire plants, and are now running at full capacity. Even at this they have hard work to keep up with the orders coming to them from all quarters. Dealers in builders' supplies have all done a good business so far and believe this year will prove an exceptionally good one.

Leffler & Bland.

Godfrey Leffler, one of Marion's staunchest and oldest citizens, who died a year ago, founded the builders' supply firm of Leffler & Bland thirty years ago, located on North High street. The son is the Leffler in the present firm. A switch track from the Big Four runs alongside the yard and close to the doors of the warehouse, which has a storage capacity of 1,300 barrels. The firm has another yard at North State street between the Erie and the Big Four tracks, with two switch tracks running into it. This yard is used for storage purposes solely and for coal. At the High street yard builders' supplies are kept exclusively. Its shipping facilities and arrangements are remarkably well adapted for handling the materials economically. The firm handles Alpha, Whitehall, Universal and Medusa Portland cements, and Speed's Louisville Hydraulic cement, and plaster from the United States Gypsum and Grand Rapids Plaster companies. They are agents here for both these companies. Lime is also carried in bulk from John Owens & Son of Owens, O., and the Evans Lime & Stone Company of Marion, O.; hydrate from the Ohio & Western and the Woodville Lime & Cement companies; fire brick, fire clay and flue lining from the Robinson Clay Product Company, and sewer pipe and fittings from the American Sewer Pipe Company; also sand and brick. They are agents for Sackett's plaster board. They take contracts for brick and stone work, and handle hollow building blocks and conduits. They had a fine business last year and believe that business this year will be one of the best seen for some time.

Ohio Milling & Elevator Company.

Ohio Milling & Elevator Company.

When R. Oborn, a director in this company, was appointed receiver his position was far from being an easy one. Mr. Oborn went ahead on sound business principles, however, and to-day has the satisfaction of seeing the concern in good condition. The Ohio Milling & Elevator Company, which deals in grain, flour and builders' supplies, was established five years ago, and has its office and yard on North Vine street and the Big Four tracks. It has good shipping facilities and its yard is admirably arranged for prompt delivery of materials. The warehouse has a storage capacity of 1,000 barrels. The principal brands handled are Atlas Portland cement; plaster and hydrate of the Toledo Builders' Supply Company, including its Cresceus brand of plaster; lime in bulk from John Owens & Son, Owens, O., and the Evans Lime & Stone Company, of Marion, O., and sewer pipe and fittings, wall coping, flue lining, fire brick and fire clay from the Robinson Clay Product Company and Houston Bros. Mr. Oborn started a number of farmers near Marion to using cement several years ago, and today sells large quantities in eral years ago, and today sells large quantities in the farming districts. He believes great things can be expected of the coming season.

J. L. Price Company.

J. L. Price Company has its coal and builders' supply yard at North Prospect street and the Big Four and Erie railways. A switch track from the Erie runs alongside its yard and close by the doors of the warehouse which stores 1,000 barrels of lime,

cement and plaster. Its shipping facilities are also good. It handles York and Edison Portland cement; White Rock plaster; lime in bulk from the Evans Lime & Stone Company, Marion O., and hydrate from the Ohio & Western Lime Company, as well as sewer pipe and fittings from the Robinson Clay Product Company. It has a good trade from farmers and has found business brisk, considering that little building has been done this year in Marion. Prospects, however, for a rattling trade in the near future are very bright. very bright.

NAPOLEON.

Napoleon is a live town and has put up a number of buildings this year, besides making public improvements which were not considered last year. Dealers here have done a good business, especially in cement used by the farmers in making improvements on their farms last year to an extent far greater than in any year in the past. The prospects for an active demand for cement and building materials this year are especially bright.

Dietzen & Johnson.

Dietzen & Johnson.

Thirty years ago T. J. Ward began business in Napoleon with a mortar box and hoe, mixing lime on the sidewalk, and selling it to the citizens. He is still living, but has retired, his successors being Dietzen & Johnson, who took possession of the plant at 415 Perry street two years ago, and have secured a large patronage. The Wabash railway is connected with their yard and warehouse by switch track. They have facilities for storing 1,200 barrels of lime, plaster and cement. This firm handles Wabash and Lehigh Portland cements; lump lime in barrels from the Ohio & Western Lime Company, and hydrate from the Woodville White Lime Company; plaster from the Grand Rapids Plaster Company; sewer pipe and fittings, fire brick, fire clay, fine lining and wall coping from the Robinson Clay Product Company, as well as sand and gravel. They also manufacture eement blocks, porch columns and piers and cement fence posts. Their output is 2,000 cement blocks a month. These blocks are mostly used for foundations and a large percentage of them is sold in the farming districts. Business has been good this year with them.

Thiesen & Hildred.

Thiesen & Hildred.

The planing mill of Thiesen & Hildred was built by John Thiesen in 1864. He formed a partnership with Mr. Hildred in 1874, and the firm name has remained the same since that time. Mr. Thiesen retired at the end of fifteen years, and Mr. Hildred retired two years ago, the sons of the founders of the business conducting it since. The firm has two yards, one at 265 West Front street, the other on Scott street. The warehouse used for cement, lime and plaster has a storage capacity of 500 barrels of these materials. They handle Castalia Portland cement, lump lime in barrels and also the hydrate from the Ohio & Western Lime Company; plaster from the Napoleon Elastic Pulp Plaster Company; sewer pipe and fittings, flue lining, wall coping, fire brick, fire clay, etc., from the American Sewer Pipe Company, and also sand and gravel.

The firm does an extensive business, and reports

The firm does an extensive business, and reports that the demand for cement from farm districts has increased fully twenty per cent over last year, and keeps on increasing. Business has been extraordinarily good so far this year and the prospects for the immediate future are exceedingly bright.

John Leonhart.

John Leonhart, dealer in lumber, lath, shingles and building materials, has been in business over twenty years. His planing mill and yard are located at 128 East Maumes avenue. The warehouse has a storage capacity of 500 barrels of lime, cement and plaster. Mr. Leonhart handles Diamond Portland cement, lime in barrels and hydrate from the Ohio & Western Lime Company, and plaster, the product of the American Gypsum Company. The facilities he possesses for receiving, shipping and handling these materials are excellent, and he has established an enviable reputation for promptness of delivery. The demand for cement from the country districts he says is constantly increasing. Business this year with him is good, better than the year before, and he feels that the future is full of promise.

The Freeborn Engineering Company, of Kansas City, has been awarded the contract for the construction of a large Portland cement-plant at Juarez, state of Chihuahua, Mexico, for the International Cement Company. The plant will be erected across the river in Mexico from the \$2,500,000 plant recently crected in El Paso by Carl Leonardt and associates, of Los Angeles and Denver.



MAKES A CHANGE.

Thomas J. Mannion, until recently one of the most prominent plastering contractors in the city of New York, has become vice-president of the Monument Plaster Company, whose office and factory is at the foot of Essex street, Harrison, N. J. They are manufacturers of stucco and also inside plaster.

In a circular which they have recently issued, the Monument Plaster Company say, "We have perfected a slow-setting material which eliminates the necessity of waste material in the use of quick-setting material. It is more durable and attains a greater hardness than any of the others on the market, the basis being lime, it is more elastic, will therefore stretch farther than any of the so-called quick-setting materials.

"'Our Oriental Finish, a perfected stucco, will mean greater returns and more satisfactory results. We can supply it in all colors."

The many friends of Mr. Mannion will join with

ROCK PRODUCTS in wishing him every succe

LOUISVILLE PLASTER NEWS.

Louisville, Ky., July 15.—The demand for wall plaster is very satisfactory, local manufacturers and dealers reporting a steady business. While most of that which is being turned out is going into small structures, the aggregate is large, and is giving everybody plenty to do. Prices are only fair, and the trade is hoping for increases before the season is over.

hoping for increases before the season is over.

The Kentucky Wall Plaster Company is completing the stucco exterior of its building. Business was reported good, one of the main difficulties just now being the high cost of hauling. If this problem could be disposed of, the rest would be easy. The company is using a mixer manufactured by the J. H. Day Company, of Cincinnati, and a sand drier of its own manufacture. Owing to the long distance it has had to transport plaster, it has had plans drawn for a warehouse to be constructed at Preston and Burnett. This will enable it to handle business in the southern part will enable it to handle business in the southern part of the city very easily.

Business with the Southern Wall Plaster Company was reported good. They are turning out 400 or 500 sacks of plaster a day, and the Day mixer and drier which are in use are doing the work right. Prospects

The Grisanti Statuary Company, of this city, is building a three-story addition to its factory. The company has had an encouraging increase in the demand for its product, and has found the extension advisable. The building is of brick, and will be equipped with the most improved machinery, including pneumatic tools, for the manufacture of statuary and interior decorations. Work on the building is now in

TOLEDO PLASTER NEWS.

Toledo, O., July 18.—The Fishack Plaster Company has almost doubled its floor space, its legal department occupying quarters in the main offices, instead of elsewhere.

Peter Petersen, a local plastering contractor, has returned from an extended visit to his native home in Nerway. He reports several contracts for small

in Norway. He reports several contracts for small jobs and does not confine himself to any particular brand of plaster, but generally allows the supervising architect to specify the brand to be used which, as he says, results in his using practically all the various brands of hard wall plaster on the market. He favors, however, the use of home products whenever possible.

BUSINESS VERY GOOD

The Fishack Plaster Company, of Toledo, Ohio, manufacturers of wall plaster, have the following to say regarding business conditions: "While we are not furnishing any big jobs at present we have quite a few small jobs under way, and, taken as a whole, business is very good at this time. The prospects for fall trade are very bright and we look for a large volume of business for the balance of the year."

The Puget Sound Asbestos Plaster Company has been organized at Tacoma, Wash., by H. F. Norris, C. Ross, F. Stewart and W. Simpson. The company plans to develop an asbestos deposit in Idaho.

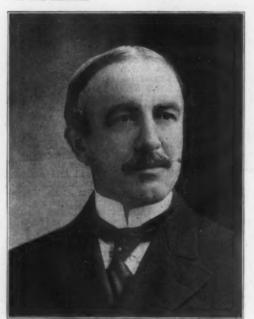
REJOINS ACME FORCES

M. M. Briggs, who was with the Acme Cement Plaster Company for eleven years, and for the past two years has been with the United States Plaster Company, has again gone with the Acme people, taking charge of their Kansas City office, which has just been opened at 1307 R. A. Long Building. This office has charge of the business of the neighboring river towns, as well as the local business.

RECONSTRUCTING PLANT.

Quanah, Tex., July 16.—Work is proceeding on the reconstruction of the plant of the American Cement Plaster Company, recently destroyed by fire. The entire south section of the plant is completed and the steel supporters for the plastering sections are being crected. The plant will be completed within two weeks, when it will again resume full operation. The new plant will be larger and better constructed than the one destroyed.

The Colonial Wall Board and Plaster Company, have offices in the Holland Building, St. Louis, Mo., and their plant is situated at Venice, Ill., Mo., and their plant is situated at Venice, Ill., near the railroad. J. W. Voglesong, the manager, says he finds the demand for their brand of hard wall plaster very satisfactory and the outlook good for fall business.



THOMAS J. MANNION, HARRISON, N. J.

Ideal Sand Company, of Ottawa Ill., has been in-corporated with capital stock of \$1,000, for mining and shipping sand. The incorporators are John L. Johnson, Charles A. Hunsberger and Jessie Johnson,

United States Sand Company, of Chicago, Ill., has been incorporated with capital stock of \$25,000. The incorporators are Max Mildenburg, E. N. Callahan and Morton H. Eddy.

The Bock Plaster Manufacturing Company, New York City, have moved their offices from the Metro-politan Building to the Fourth Avenue Building, 381 Fourth avenue, corner of Twenty-seventh street and Fourth avenue.

The Empire Gypsum Company, Garbutt, N. Y., have removed their offices to the Cutler Building, Rochester, N. Y.

The Arkansas Silica and Sand Co., of Guion, Ark., is expected to resume operations soon. The company has been tied up in litigation for some

The Ft. Dodge Portland Cement Company has been incorporated at Ft. Dodge, Ia., to buy and sell cement. The capital stock is \$3,500,000. Incorporators are F. D. Brandenburg, Sioux Falls, S. D.; M. J. Nicholson, H. W. Himerich, Rapid City, S. D.; H. S. Van Alstine and F. J. Fishenbanner, of Gilmor City, Ia.

FORT DODGE A GREAT PLASTER CENTER.

(Continued from page 3.)

exact, the aerial tramway is 9,600 feet in length. exact, the aerial tramway is 9,600 feet in length. Other work is now in progress near the mouth of the company's mine, among which is the erection of a crusher plant, which will soon be completed. When completed all the gypsum rock will be crushed at this plant and not at the mill, as is done at present, an advantage sought by this company for some time in the year. time in the past.

The Acme Plaster Company owns about 160 acres of gypsum land. Its mill is located in the vicinity of the other plaster mills, about four miles from the city. The equipment of this plant is modern and has three kettles.

The American Cement Plaster Company, which lately has taken over the property and interests of the lowa Hard Plaster Company, operates its mill about four miles east of the city in the gypsum land strip. The mill has three kettles, and every-thing throughout equipped with up-to-date machinery.

chinery.

The Cardiff Gypsum Plaster Company is among the oldest concerns in Ft. Dodge, owns 160 acres of gypsum land, operates a modernly-equipped mill about two miles from town and has an output equalling on an average that of the other mills.

Ground was broken some time ago and the foundations nearly completed for the plaster mill of the Wasem Gypsum Company. The mill will probably be finished and in operation next year. This company is a local organization composed of the thirteen members of the Wasem family, who live here. All the mills are busy and doing well.

WILL ENLARGE PLANT.

Blue Rapids, Kan., July 20.—The American Cement Plaster Company, of this city, has under way the enlargement of their No. 2 plaster board mill. This addition to their building was made necessary by the extensive call for the product of the mill. The addition is to be 150 feet long and 22 feet wide, and as soon as it is completed new machinery will be installed, thus enabling the company to manufacture an amount of the plaster board to meet the present demand.

C. VOLNEY KING DIES.

New York, N. Y., July 20.—C. Volney King, a manufacturer and dealer in wall-plaster for many years, died at his residence at 20 Fifth avenue, June 25, aged 75. Mr. King was born at Saratoga Springs, but nearly all his life was spent in New York City. He was one of two sons of Jerome B. King, who established himself in the plaster trade here in the year 1839. The business was continued by the sons, and eventually by Mr. C. Volney King, as surviving owner.

Mr. King was a member of the Building Trades

as surviving owner.

Mr. King was a member of the Building Trades Employers' Association and the Union League Club. Such was his standing in the business and political world that he was once the candidate of the Republican party for mayor. He leaves a widow, but no sons or daughters. J. B. King, the plaster manufacturer of 17 State street, is a nephew.

WILL ESTABLISH WORKS AT MURRAY.

Salt Lake City, Utah, July 19.—The Western Fire Clay Company, of Salt Lake City, with a capital stock of \$500,000, will establish works at Murray for the manufacture of fire clay and silica brick. It is the intention to commence work on the new plant at once and rush it through to completion.

The new organization takes over the plant of the Western Clay Products Company, which was formerly the Ashton Fire Brick & Tile Company, located on Third South street, which has been making brick and kindred products for thirty years. The plant has recently been controlled by the Salt Lake Pressed Brick Company.

The California Gypsum & Plaster Company, of Mojave, Cal., has purchased from the Wood Fiber Plaster Company the cement plant at Ninth street and Santa Fe tracks, Los Angeles, Cal. The plant which has been idle for eighteen months will now be put in operation. It is fully equipped with crushers, calcining kettles and other machinery, and has a frontage of 300 feet on the Santa Fe tracks. The main building is a two-and-a-half-story structure.

Miami Sand Company, of Cincinnati, Ohio, has been incorporated with capital stock of \$10,000, by Thomas P. Greenhow, W. J. Schick, John M. Schick, Peter Brooks, William R. Collins and Albert Bur-

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DEVELOPING THE LIME BUSINESS.

following interesting communication The following interesting communication from Frank C. Ford, second vice president and assistant manager of the Carolina Portland Cement Co., known all over the South as the largest manufacturers and handlers of builders' supplies in that territory, is decidedly interesting, and we hope that it will result in some concerted action being taken by the manufacturers along the lines suggested by Mr. Ford. The letter is reproduced here in full:

"There are lots of uses to which lime could be successfully put if the business were developed. It seems that less has been done in this direction by the lime producers than by the producers of almost every other line of goods. The result is that there is but little increase in the consumption of lime each

"No business can stand still and be successful. If the lime people would, individually or as a body, expend a fraction of a cent per barrel in advertising the virtues of lime, the consumption could be materially increased. There is an enormous field all over this country, and in the South particularly, for landlime for agricultural purposes, but by reason of the fact that the kilns throughout the South have not adjusted themselves and the packages, and made known to the farmers in the proper way the many advantages they would derive from this class of fertilizer, there is but very little of it used.

"Our company, however, has recently decided, single-handed, to go into this business, and we are now preparing a campaign with the farmers which we hope will shortly mean a big business to us on land-lime. In fact, so satisfied are we that we can dispose of it that we have contracted with the Rockland-Rocknort Lime Company of Rockland Mo. for saveral dispose of it that we have contracted with the Rockland-Rockport Lime Company, of Rockland, Me., for several thousand tons of their especially prepared land-lime. This we will bring down in schooner lots to several south Atlantic ports, through which gateways we will distribute it to the interior. We anticipate that within a year or two an enormous business is possible.

"The Rockland-Rockport Lime Company have published two different booklets on their R-R land lime, which are interesting. These people, we understand, have made a great success in the East with this material, and they are principally responsible for our taking it up to push through the South and Southeast.

taking it up to push through the South and Southeast. "Our company manufactures high-class building lime at our plant at Keystone, Ala., which is about the largest in the South. We have spent a great deal of money in producing a very high grade lime, in a high-class barrel, but we admit being like any other party in the business—willing to sit still and take the orders which come to us. We have never done much toward encouraging the use of lime in general, although we would be glad to join in any plan that the American or Southern manufacturers would take up with this end in view."

ERECTING A NEW KILN.

St. Louis, Mo., July 15.—The John Armstrong Lime Kiln Company has ordered the erection of a lime kiln, using producer gas, as an experiment.

THE KRITZER WAY.

Huntington, Ind., July 16.—There was a disastrous fire at the Ohio & Western Lime Company's plant in this city on June 29. It destroyed two eight-kiln plants and their large hydrating plant. The loss is estimated at \$125,000.

Immediately after the fire work was commenced once to rebuild the plant.

Charles Kritzer, the well-known hydrating expert and inventor of the Kritzer process of hydrating lime, was sent for and an order placed for a new hydrating plant, which will be larger than the one which burned down.

The ROCK PRODUCTS correspondent, in conversation with Peter Martin, president and general manager of the Ohio & Western Lime Company, elicmanager of the Ohio & Western Lime Company, elicited the following information: "We are rebuilding our hydrating plant, together with six additional kilns, which will be one of the finest, if not the finest, in the United States. The entire mill is to be operated by electric power, and the very best of machinery will he used. The building will be of stone and brick, and will be 200 feet long by 40 feet wide, and as nearly fireproof as possible. The mill will be erected at Huntington at our present plant No. 4. We still have at Huntington twenty good kilns in operation, and can take care of our lump business from Huntington. Our hydrating and agricultural lime business will be taken care of from the Toledo district plants until such time as we have our plant ready, which will be in about 60 days.



HYDRATING PLANT BURNED AT THE OHIO & WESTERN LIME COMPANY'S PLANT AT HUNTINGTON, IND.

"This is the advantage a dealer has in dealing with a firm as large as ours, and one that is able to always take care of their wants. Some of our largest consumers called us up after they had read of the fire and wanted to know where they could get their supplies. We told them to send in their orders direct to Huntington the same as they had get their supplies. We told them to send in their orders direct to Huntington, the same as they had before, and we would fill their orders for lump lime from Huntington. They said they thought we had a fire, but we told them it did not affect us, as we

a fire, but we told them it did not affect us, as we had five plants and only two had been destroyed. They said it was surely an advantage to deal with a firm as large as this, with ample capacity located in different parts of the country, that could always take care of its patrons.

"After the mill is completed we will be able to take care of the hydrating lime business from Huntington, the same as we did before, and it will be one of the finest mills in the country. We are not disabled nor did we have to refuse any orders for agricultural hydrates or ground lime. We can fill all orders the same as if nothing had happened."

LOUISVILLE LIME NEWS.

Louisville, Ky., July 15.—The demand for lime is air, although no special features mark the sale of the staple. There is a good amount of building in recess which is consuming a normal quantity of lime, the staple. process which is consuming a normal quantity of lime, though the general use of reinforced concrete instead of brick tends to reduce the use of lime. Some of the manufacturers believe, however, that it will come into general use as a material for fertilizer before long, and that this will absorb a large amount of it. The Union Cement and Lime Company has several the set Salam, Ind., where it manufactures

The Union Cement and Lime Company has several lime kilns at Salem, Ind., where it manufactures lump lime, which is shipped in bulk daily to Louisville and stored in the company's two warehouses. It is barreled there and shipped out as occasion requires. It is handled every day in order to keep it fresh, and owing to its being in lump form it is not shipped to very distant points. There is a good normal demand in the surrounding territory for the company's "Salem" brand.

The lime demand was reported just fair by Henry

"Salem" brand.

The lime demand was reported just fair by Henry Gray, of J. B. Speed & Co. The spring is of course the best season for its sale, and the heavy end of the season is now passed. The company manufactures both lump and hydrated lime at its Milltown, Ind., plant, where it has four kilns. The hydrated lime is shipped in sacks, the remainder in bulk.

At Milltown the company handles the lime proposition very simply. The limestone rock is hauled up an incline on dump cars, dropped into the kilns and

tion very simply. The limestone rock is hauled up an incline on dump cars, dropped into the kilns and the lime is taken out at the bottom. The hydrated lime is of course put through the further process of absorbing water, but the handling is not difficult.

The Kentucky Carbonate of Lime Company has been organized with a capital stock of \$2,000. E. H. Powell, A. B. Wood and L. F. Nutter are the incorporators, the company being connected with the Kosmos Portland Cement Company. It will dispose of the waste of the Kosmos plant for fertilizer. of the waste of the Kosmos plant for fertilizer.

WILL BUILD LIME KILNS.

Dallas, Tex., July 16.—As a result of the successful experiments of the past few weeks in exploiting the quality of blue lime rock in the Wichita mountains, north of Caehe, G. W. Droste says he has interested financial men in his project and preparing to establish a permanent lime kiln th wholesale market capacity.

DESTROYED BY FIRE.

Everton, Mo., July 6.—The lime kiln and barrel factory of the Ash Grove Lime Company was destroyed by fire last night. The loss is estimated at \$10,000. The fire was started from a defective flue at one of the kilns. The flue had been dead for some time, but was put into service yesterday morning. morning.

The Phenix Stone & Lime Company, of Kansas City, Mo., has increased its capital stock from \$60,000 to \$125,000.

*125,000.

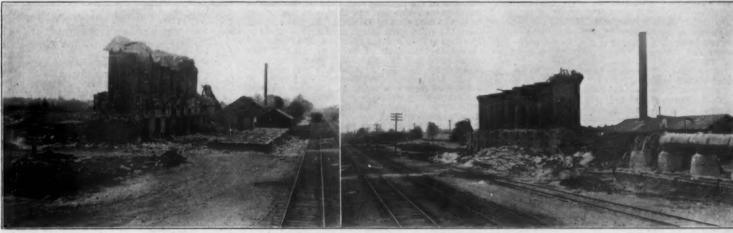
The Lawton Limestone Company, of Lawton, Ky., has been incorporated with capital stock of \$20,000 by J. A. Lane, H. B. Campbell and L. C. Turley.

The Blount Lime & Quarry Company, of Blount Springs, Ala., has been incorporated with capital stock of \$20,000. The incorporators are W. B. Drennery, C. C. Nordan and Thomas Sinclair.

The Berkwood Lime & Stone Company, Limited of

The Rockwood Lime & Stone Company, Limited, of Rockwood, Ont., Canada, has been incorporated with capital stock of \$40,000.

The Utah Lime Company, of Salt Lake City, Utah, has increased its capital stock from \$20,000 to



DESTRUCTION OF TWO EIGHT KILN PLANTS ON TWO SIDES OF THE TRACK AT THE PLANT OF THE OHIO & WESTERN LIME COMPANY, HUNTINGTON, IND.

WILL INSTALL NEW CRUSHER.

Port Clinton, O., July 13.-The officers of the Port Clinton, O., July 13.—The officers of the Keily Island Lime & Transport Company made an inspection of their different plants recently. The quarries and plants are located at Marblehead, Lakeside, Genoa, White Rock and Kelly's Island, and the trip was made in a special train. An expensive new crusher will be installed at White Rock, and many other improvements will be made at the different plants. at the different plants.

FOUR CONCRETE HOUSES.

Marblehead, Ill., July 19.—The Marblehead Lime Company is having four new concrete houses built.

USES THE KRITZER PROCESS.

Baltimore, Md., July 18.—A concern which is furnishing a great deal of lime for this section of the country is the Tidewater Portland Cement Company, whose hydrated lime plant, using the Kritzer process, at Union Bridge, Md., is one of the most complete in the country. The concern is a new one complete in the country. The concern is a new one and is now building an enormous cement plant near its lime kilns. M. McB. Pritchard, local manager of the company, says he is selling the entire capacity of five kilns and that he could sell more if

pacity of five kilns and that he could sent more the plant could turn it out.

Prices of lime, he said, are good and the indications are that they will remain so for some time to come. The lime is being shipped in paper bags and very little is sent out in barrels. When barrels are used they are the steel hoop variety.

Mr. Pritchard said that work on the cement plant is progressing rapidly. The machine shops, kiln

is progressing rapidly. The machine shops, kiln building and power plant are well under way and the storage warehouse will soon be completed. Small tramway cars are used to haul the stone kilns, which are only a short distance away. cars are used to haul the stone to the

The Alabama Portland Cement Company's plant, situated about one mile from Demopolis, was sold a few days ago by Walter C. Benjamin to E. E. Benjamin, of New York.

SAND-LIME BRICK

RESUMES OPERATIONS.

Holland, Mich., July 19.—E. J. Herrick has sold his brick factory on Fairbanks avenue to Holland capitalists and operations have been resumed. The plant has a capacity of 30,000 sand-lime brick daily and a busy season is anticipated. The factory had been idle for about a year.

SAND-LIME BRICK PLANT FOR SALE.

The Baker & Holmes Company, of Jacksonville, Fla., offer for sale a sand-lime brick plant with twenty-two acres of land. The capacity of plant is

INVENTS NEW PROCESS.

Henry Jaxtheimer, New Wilmington, Pa., a graduate of the science department of Westminster college and the Case School of Applied Sciences at Cleveland, Ohio, has invented a new process for manufacturing silica sand brick, and severe tests so far have proved it to be of value. The severest test was at the West Foundry Company's plant, test was at the West Foundry Company's plant, New Castle, Pa., where a converter lined with this new brick stood for 16 consecutive turns, and when the cupola was relined, the brick had diminished by one-half inch against three and one-half inches of the former product. The brick is to be made under a patent, and federal officials have taken the matter of a large purchase under consideration.

SAND MOLDED BRICK.

Centralia, Wash, July 20.—The new brick yard, owned by S. L. Alexander & Son, is now ready for operations. A large drying shed with a capacity of 15,000 brick daily has just been completed. The company will manufacture what is known as sand molded brick.

C. H. Boore, of Argenta, Ark., is soon to put in a plant for the manufacture of sand-lime brick.

The Canadian Brick & Lime Company, of Texas, which Mr. Harmon is manager, is soon to open of which Mr. Harmon is manager, is societs sand-lime brick manufacturing plant.

The new sand-lime brick works of the Unit Brick & Tile Company, Port Jefferson, N. Y., are now complete, representing a cost of \$75,000. Robert L. Davis is the largest stockholder.

The San Antonio Sand Lime Brick Company has been incorporated at San Antonio, Texas, with a capital stock of \$20,000, by William Hollis, Martin Wright, J. R. Davis and R. J. Boyle.

BUILDING OPERATIONS

In the Leading Cities of the United Stares in 1909, From Statistics Published by the Geographical Survey, Show Gains.

The statistics of building operations in the principal cities of the United States during the calendar year 1909, just published by the United States Geological Survey, show that the country had in 1909 recovered from the financial disturbance of 1907-8, for the building record for 1906 was surpassed.

Comparisons of Fifty-one Cities for Four Years.

The cost of building operations in 51 cities that The cost of building operations in 51 cities that reported for all three years was \$646,059,855 in 1907, \$566,165,404 in 1908, and \$771,937,564 in 1909; an increase for 1909 over 1907 of \$125,877,709, or 19.48 per cent, and over 1908 of \$205,772,160, or 36.34 per cent. The estimated cost of building operations in these cities in 1906 was \$700,000,000, so that there was an increase in 1909 over 1906 of more than 10 per cent

Increases and Decreases of Individual Cities.

The increases and decreases for individual cities The increases and decreases for individual cities in 1909 as compared with 1908 are not very significant, because 1908 was not a normal year. The largest increase reported for 1908 was \$8,141,720, or 13.78 per cent, by Chicago, and the next largest was \$4,446,709, or 3.92 per cent, by New York; the increases in 1909 by these two cities were, respectively, \$28,003,580, or 41.65 per cent, and \$68,228,995, or 57.91 per cent. Brooklyn, which had the largest decrease (\$25,427,604) in 1908, showed the third largest gain in 1909—\$18,402,061. Of the cities that showed decreases in 1909. San Francisco had the showed decreases in 1909, San Francisco had the largest, \$5,484,273, or 17.32 per cent; Dayton was next, with \$1,533,780, or 47.42 per cent, the largest proportional decrease; and Oakland was third, with \$1,002,051, or 15.85 per cent. The decreases in these cities may be ascribed to local causes. The significant of cities may be ascribed to local causes. The sig-nificant decrease in San Francisco indicates that the building activities of that city have probably reached a nearly normal condition after the abnor-mal condition following the great fire of 1906. The annual cost of building operations in San Francisco for the last five years has been as follows: 1905, \$18,268,753; 1906, \$34,927,396; 1907, \$56,574,844; 1908, \$31,668,341; 1909, \$26,184,068.

Comparison of Number of Permits.

The number of permits issued in these 51 cities increased from 174,594 in 1908, when there was a decrease from 1907 of 12,851, to 213,498 in 1909, a gain of 38,904, or 22.28 per cent. The number of permits or buildings does not seem to bear any definite relation to the cost of the operations, as several cities showing increases in cost of buildings. several cities showing increases in cost of buildings showed decreases in number of permits or buildings, while some of those showing decreases in cost showed increases in number of permits or buildings.

Average Cost of Work Per Permit.

The average cost of operations under the total The average cost of operations under the total permits issued in these 51 cities was \$3,616 in 1909, against \$3,243 in 1908. In New York the average cost per building was \$24,387 in 1909, against \$19,305 in 1908; in Chicago it was \$4,341 in 1909, against \$6,327 in 1908; in Brooklyn, \$4,672 in 1909, against \$4,259 in 1908; in Philadelphia, \$2,480 in 1909, against \$2,107 in 1908; in San Francisco, \$4,536 in 1909, against \$4,706 in 1908.

Character of Buildings.

For the first time an attempt was made to collect statistics of the building operations by character of buildings and also by additions, alterations, and repairs to each class of buildings. Figures reported repairs to each class of buildings. Figures reported from 128 cities gave details showing the kinds of buildings erected and the additions, alterations, and repairs to each class of buildings under 264,536 permits at a cost of \$903,385,954, the new buildings constituting 90.3 per cent of the cost and the additions, alterations, and repairs 9.7 per cent. Of the cost of these new buildings, 73.24 per cent was for fire-resisting buildings and 26.76 per cent was for wooden buildings. Of the total cost of additions, alterations, and repairs, 65.55 per cent was for wooden buildings. The average cost in 1909 for new wooden buildings. The average cost in 1909 for new wooden buildings was \$2,269; for new brick buildings, \$9,522; for stone buildings, \$11,679; for concrete buildings, \$17,099; and for miscellaneous fire-resisting buildings, \$63,890.

Kinds of Construction in Different Cities.

Kinds of Construction in Different Cities.

Seattle had the largest number of new wooden buildings, 7,355, and Los Angeles was second, with 5,284 buildings. Chicago was the leading city in cost of wooden buildings, with a total of \$13,532,880; San Francisco was second, \$12,257,683; Seattle was third, \$9,843,805. Reading was the only city

that reported no wooden buildings erected. New York reported the construction of fire-resisting buildings at a cost of \$181,918,337; Chicago was second, with a cost of \$79,105,500; Brooklyn third, \$54,658,721; Philadelphia fourth, \$42,570,770; St. Louis fifth, \$22,422,929; and San Francisco sixth, \$13,124,987. The average cost of new fire-resisting buildings in the 15 cities reporting the greatest cost for this class ranged from \$3,151 in Philadelphia to \$65,384 in New York. In new brick buildings New York was the leading city, Brooklyn second, Chicago third, and Philadelphia fourth. Chicago took the lead in stone buildings, New York being second and San Francisco third. Chicago was also in the lead in concrete buildings, with Seattle second and Philadelphia third. Out of the 128 cities considered, 79 erected new concrete buildings, 1,791 in number, which shows the widespread use of this material. ie of this material.

In addition to these 128 cities, 9 others reported

only totals for permits and for cost of buildings, which brought the total number of permits up to 273,883 and the total cost up to \$930,520,713. Of this total cost the 51 cities already referred to furnished 82.96 per cent.

The report was compiled by Jefferson Middleton

and can be obtained free by applying to the Director of the Geological Survey at Washington.

The Drainage Brick Company, of Chicago, Ill., has been incorporated with capital stock of \$10,000. to manufacture brick and building materials. The incorporators are Herman Lengfeld, John W. Atkinson and John J. McLaughlin, 145 La Salle street.

The Woodland Clay Company, Woodland, N. Y., has been incorporated with capital stock of \$50,000,

to manufacture clay products. The incorporators are John W. Anderson, Jr., William Correll and Victor Payson.

Victor Payson.

The Denver Brick, Tile & Clay Company, of Denver, Colo., has been incorporated with capital stock of \$100,000 by John B. Rankohl, Robert A. Young and William Oliver.

The Kirklin Clay Manufacturing Company, of Kirklin, Ind., has been incorporated with capital stock of \$10,000, to manufacture clay products. The directors are C. C. Huffine, H. C. Huffine and C. W. Wright.

The Kingsport Brick Corporation, of Bristol, Va., has been incorporated to manufacture brick. The officers of the company are J. D. Whitaker, Atlanta, Ga., president; F. E. Mahon, Rome, Ga., vice-president; F. G. Williams, Atlanta, Ga., secretary and treasurer. and treasurer.

tary and treasurer.

The Trenton Fire Brick Manufacturing Company, of Trenton, N. J., has been incorporated with capital stock of \$100,000, to manufacture vitrified and refractory clay products. The incorporators are Joseph B. Hottel, Elwood W. Moore and Arthur W. Belting, all of Trenton, N. J.

HYDRATING PLANT NEARING COMPLETION.

St. Louis, July 19—Secretary-Treasurer Healey, of the Glencoe Lime & Cement Company states that trade conditions continue about the same as have prevailed since May last, when the building season became fairly opened. There has been rather too became fairly opened. There has been rather too much rainy weather to admit of full time work, particularly in case of plaster and foundation jobs. Col. Cobb, the president of the company, together with his family, is visiting his old home in Maine, from which vacation trip he will return about the first of next month. Manager Philip J. Dauernheim will sail from New York for Bremen the last of the month to join his family and expects to return the month to join his family, and expects to return about October 1. Mr. Healy showed the Rock Products man some photographs showing the new lime hydrating plant which is nearing completion.

WEST COAST LIME NEWS.

San Francisco, Cal., July 15.—The Holmes Lime Company is now manufacturing between 8,000 and 10,000 barrels per month of its well known and staple "B" brand Santa Cruz lime, which is extensively used in California for brick mortar, manufacsively used in California for brick mortar, manufac-turing purposes, and for the first coat in plastering work. The company also reports an excellent de-mand for its Diamond brand of plastering lime, used for finishing, on which there has been some difficulty in taking care of the current business. This lime has been in use over fifteen years on the Coast, and has never been known to pop or pit on the wall a matter of great importance to owner. the wall, a matter of great importance to owner, architect and plasterer. The Holmes Lime Company reports a steady demand for hydrated lime, and is furnishing a large quantity of the Vigorit brand hydrated lime for a large reinforced concrete building which the government is creeting here. It is used on a basis of 10 per cent hydrated lime to 90 per cent Portland cement as a unit of 1 in the concrete mass, for the purpose of making the concrete waterproof.

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SAND AND GRAVEL

THE DEVELOPMENT

Of the Sand and Gravel Business in Des Moines is Only a Matter of Recent Years, But It Has Already Assumed Huge Proportions.

Des Moines, Ia., July 19.—The sand business was developed, reaching proportions which attracted attention, in this city only three years ago. Six years ago the method of pumping to secure sand and gravel from the bed of the river was used here.

There are nine sand companies whose plants are scattered on the Des Moines and Coon rivers over

scattered on the Des Moines and Coon rivers over a distance covering about two miles. Two of these companies have facilities for loading the sand and gravel they produce on cars for shipment to various parts of the state and the northern edge of the state of Missouri. This is the boundary of the territory to which sand is shipped from here. The total number of cubic yards of sand and gravel annually taken from the beds of the two rivers here is estimated at any proximately 25,0000 cubic yards.

is estimated at approximately 250,000 cubic yards. The Coon River Sand Company and the Des Moines Sand Company, the two largest companies at Des Moines, are said to produce about one half of this output. The other seven companies principally supply the local demand of the city. The supply of sand and gravel here is practically inex haustible, for the reason that when the sand in the bed of the river from where it is pumped, is exhausted at the end of the season, the high water in the spring of the year fills up the holes again with sand and a new start in the same place is

with sand and a new start in the same place is made the following season, and so on indefinitely. All the sand and gravel pumped out of the beds of these two rivers here is hard flint. There is no slate or soft sandstone in either the Coon or Des Moines river. The screened sand is divided into two classes, fine and coarse. The fine is used for paving purposes and the coarse for reinforced concrete. The sand and gravel as it comes from the rivers is called "concrete mixture," and will run from 20 to 40 per cent gravel. When the sand is screened, the gravel runs from ¼ to ½ inch. A peculiar feature in the industry this year is

A peculiar feature in the industry this year is that, because of no rains, there consequently has been no high water to wash sand again into the holes in the river bed made last year and the smaller concerns have practically been unable to supply the local demand for the time being.

The Coon River Sand Company carries a large stock in reserve, storing some 10,000 cubic yards of sand out of reach of high water from which to supply the trade in emergencies like this. It built a new track half a mile in length this summer paral-

a new track half a mile in length this summer paral-leling the river and also built a portable plant for the purpose of following up the material in the bed of the river, preventing its waiting for high water to furnish a fresh supply of sand exhausted at the to furnish a fresh supply of sand exhausted at the point where the plant operated last season. Its system of pumping enables it to get the material within a radius of 200 feet to a depth of 35 feet in the river bed. When this space is exhausted the portable plant is moved to a fresh spot.

This company as well as the Des Moines Sand Company has direct connection through the local terminal with all the roads centering in the city. About helf the toppage of sand shipped is concrete

About half the tonnage of sand shipped is concrete mixture. The quality of material furnished by each company is the same grade, as it is taken from the same rivers. All the sand is thoroughly washed and

cleaned, freeing it from foreign substances.

The equipments of the Iowa Sand Company, the Valley Junction Sand Company, the plant of Frank Valley Junction Sand Company, the plant of Frank Cram, Commerce Sand Company, Des Moines Builders' & Supply Company, the Oak Park Sand Company, and the Hodgen Sand Company consist of modern machinery, including pumps, screens and machinery for washing and cleaning sand. The production of sand and gravel in this city is fully double what it was last year. The sand season usually commences about April 1 and comes to a close the 1st of December. Occasionally it continues as late as the middle of December.

C. D. Smith, Lewis Baker, W. L. Smith, W. B. Troy and W. B. Troy, Jr., recently filed an application for a charter for the Memphis Stone and Gravel Company, to formally change the name of the Consolidated Stone and Gravel Company.

CHICAGO SAND AND GRAVEL NEWS.

Chicago, Ill., July 19.—Sand and gravel men in this city experienced this month what they have always faced in July in past years—a quiet time. They feel nothing disquieting in this condition, They feel nothing disquieting in this condition, which gives them the opportunity of enjoying a vacation, joining contractors and builders in the country for rest and fresh air. Some large building operations have halted this month, but this is due more to the hot weather than to the unsettled financial conditions in the East. This is the belief financial conditions in the East. This is the belief of the men in the sand and gravel trade. The demand for sand and gravel is slow this month in consequence and probably will remain so till the opening of the fall season. Torpedo sand prices are stiff, with an upward tendency. Bank sand has been advanced to \$1.25 a cubic yard. There seems to be every prospect for a heavy demand and a very brisk business for this trade the coming fall. fall.

At the offices of the Atwood-Davis Sand Company it was stated that the demand for torpedo or coarse sand and gravel had materially decreased this month. It was thought that this was to be acmonth. It was thought that this was to be ac-counted for by a number of building operations in the city being held up, partly for the reasons of the unsettled financial conditions in the East and partly due to the summer period, always characterized by quiet times in building circles. The demand, however, is stable and prices firm. Prospects for the opening of the fall business is ex-

ceedingly good.

P. M. Richardson, of the Richardson Sand Comnany, said: "The demand for torpedo sand and P. M. Richardson, of the Richardson Sand Com-pany, said: "The demand for torpedo sand and gravel this month is slow compared to the demand in the early spring. We expected this, as the de-mand always slackens at this time of the year. This condition is due to some holding up of build-ing operations on account of hot weather and an oversensitiveness of capital. Prices for torpedo sand are stiff and bank sand has advanced to \$1.25 a cubic yard. It looks to me that we will have more business than we can comfortably handle this fall."

fall."
"To be frank, business this month is very quiet, but there is nothing disquieting about this condition," said P. M. Lewis, secretary of the American Sand Company. "It is always quiet during the two hot summer months, as work cannot be done with that vigor contractors and builders demand. For this reason building operations have been held back and consequently the demand for torpedo sand has fallen off. That is the whole story in a nutshell. Bank sand has advanced from \$1.15 to \$1.25 a cubic yard and torpedo sand prices are strong.

shell. Bank sand has advanced from \$1.15 to \$1.25 a cubic yard and torpedo sand prices are strong, with an upward tendency. Everything points to a very brisk business in the fall, and I believe we will have more of it than we are looking for."

J. S. Putney, of the Lake Shore Sand Company, Ohio, who was getting ready to escape from the heat of the day and his office, put it thusly: "Business is dull, the demand for torpedo sand and gravel is off and we will have a quiet summer, not more so than usual, however, with prospects of lots of business opening with the fall scason."

John N. Bos, one of the big and veteran shippers of Indiana bank sand, said: "Business is quiet, demand slow, prices advancing and prospects good for a big fall business."

LOUISVILLE SAND MEN BUSY.

Louisville, Ky., July 19.—The sand and gravel situation in Louisville is very good, and while no especially large jobs are going on, enough are being pushed to enable a satisfactory volume to be used. The sewers are still taking a lot of material, although the biggest part of that work has been done. All of the sand companies have their diggers working

right along, and are turning out a good lot of stuff.

The Ohio River Sand Company is completing its handsome pressed brick office building, and will be in it in a few weeks. Business with the company is good, both diggers working all the time. The company has a splendid system of handling sand and gravel. An inclined track leads from the river bank, gravel. An inclined track leads from the river bank, and hopper cars are filled from the diggers. These are then run up the incline and upon elevated tracks. From here the sand can either be dropped direct into carts or railroad cars, several tracks entering the yard, or dumped for storage. The stuff requires little handling, and both time and labor are saved. The company is conceded to have one of the best plants of the kind in the country, and Manager John M. Settle is justly proud of it. Mr. Settle spent the Fourth and a few days following at Bay View, Mich., where members of his family are spending the sumwhere members of his family are spending the sum-

The Nugent Sand Company, which gets its sand at Six Mile Island and its gravel at Towhead Island, is keeping two diggers busy, having just added a

fine new digger to its equipment. It has a capacity of 10,000 cubic yards a day, and is turning out nearly that much. It has a 10-inch pump and 85 horsepower engines. It was built at the local docks by the Nugent company, the machinery being installed by the Atlas Machine Company, of Indianapolis. The com-pany stores its sand at Fifth and River, using the best machinery possible, and though the heavy de-mand has left little surplus it has plenty of space for handling a big reserve supply.

BALTIMORE SAND MEN.

Baltimore, Md., July 16 .- The sand and gravel market here is in good shape, but there is very little competition for such a large city as Balti-more. The Arundel Sand & Gravel Company probsold in this city. Its facilities are equal to any in the country and the sand and gravel from the shores of the Chesapeake bay are equal to the best. The company recently completed a modern sand and gravel elevator on one of the new docks of the city's new \$10,000,000 system. The building is a concrete structure and is so arranged that the products are lifted from the seews by a huge seep and poured into bins from which it can be delivered to waters. ed to wagons without rehandling.
With the vast amount of building in progress now

the company is doing a rushing business. Some of the most important contracts of the month were the sand for the Fidelity building and the Munsey building. The company is also furnishing sand and gravel for a considerable quantity of sand and gravel for smaller building operations

SELLS ABOVE APPRAISEMENT.

Columbus, Ohio, July 18.—Sheriff Sartain yester-day sold the property of the Ohio Sand & Supply Company in West Spring street to Clarence E. Richards for \$15,000. It was appraised at \$11,379. Included are Scioto river dredging boats and a cement block manufacturing plant in Spring street west of the Hocking Valley tracks.

Wabash Gravel Company, Lafayette, Ind., has been incorporated with capital stock of \$10,000. The incorporators are Samuel Souders, Arthur Mc-Queen, G. B. Thompson, Harriet De Grief and Lulu R Bissell

The Wabash Sand & Gravel Company, of Terre Haute, Ind., have built a new boat to take the place of the one which was sunk early in the spring. The Wabash Sand & Gravel Company now have seven pits on the Wabash river. They are among the largest sand operators in this territory.

The Silica Sand & Rock Company, of Fleetwood, Pa., has leased the sand quarries of A. E. W. Hawk.

Floyd J. Norris, formerly manager of the Ohio-Michigan Sand & Gravel Company, of Toledo, Ohio, died recently at DeSoto, Mo. He was well known in Toledo business circles

The M. Demarest Company, a wholesale dealer in sand and gravel, at Twenty-fifth and East River, Brooklyn, N. Y., was one of the first corporations to take advantage of an amendment to the bankruptey act, adopted by the last congress, which permits corporations with some exceptions to file voluntary petitions in bankruptey. The liabilities are given at \$3,235 and the assets \$3,042.

The Albany Sand & Gravel Company, of Albany, Ore., has been incorporated to dredge gravel from the bed of the Willamette river. The directors of the company are J. W. Billings, High G. Fisher the company are J and H. C. Harkness.

The Anderson Sand Company, of Chicago, Ill., has been incorporated with capital stock of \$100,000, and will deal in sand, clay, gravel, earth and byproducts. The incorporators are Thomas C. Anderson, Charles B. White and Max Robinson.

The Keystone Sand Company, of San Francisco, with works in San Mateo County, has levied an assessment of \$10 per share on its capital stock.

The Staffordville Gravel Company has been incorporated at West Creek, Ocean county, New Jersey, with a capital stock of \$10,000, by Joseph B. Cox, Joseph B. Cox, Jr., both of West Creek, and Isaac A. Lee, Camden, N. J.

The Smithville Sand & Gravel Company, of Smithville, Tex., will install plant for extracting sand and gravel from the bed of the Colorado river.

JIII

BUYING QUARRY LANDS.

Possibly every quarryman of extended experience has encountered the proposition of purchasing so-called "quarry land," and there are many who quarry rock upon the "royalty" basis. As a general proposition it is better to take title to the land upon which a quarry is to be located, but there are conditions which frequently alter the case entirely. are conditions which frequently after the case entirely. No matter which way one proceeds it is a very ticklish and uncertain problem, and one in which the quarryman must from the nature of the case assume all the risk of complete disappointment as well as the chance of extensive losses upon costly as well as the chance of extensive losses upon costly equipment which may or may not happen to be applicable to the exact location selected. You have doubtless all noticed the surprising value as farming land and been astonished with the dimensions of the crops that were formerly raised on the very spot where you find the rock now outcropping all about you. Unquestionably it would help some to defer all purchases of quarry land until the county assessor is making his rounds, and it will pay you to furnish the automobile to take him along with you. At best the quarryman has to buy a "pig in a poke," for it is always years after the purchase before anyone can tell whether or not it is valuable as a lime property or as a road material possibility. as a lime property or as a road material possibility.

Analyses of cores drilled out are only of suggestive value. They do not disclose the condition of the material to any considerable extent, and one is always inclined to give more than the stone land is always inclined to give more than the stone land is worth, no matter how carefully the prefatory examination has been made. Nothing is so difficult to secure a sample of than a stone deposit, that is of the stone itself, but when it comes to the unseen and covered up streams of underground water the unknown is often multiplied—along with the aftercost. Generally speaking, a quarry opening destroys a small part of a farm, or a possible building site. Just what it is worth if it was to be used for either of these or a similar purpose should be the price of an unopened quarry. To pay more is equivalent to playing eards or betting on a horse race.

MONEY FOR GOOD ROADS.

MONEY FOR GOOD ROADS.

In 1909 the states, counties, towns and school districts of the United States borrowed more money than ever before, issuing bonds to the amount of \$340,000,000, which is over one-third the funded debt of the federal government. Among the purposes for which the bonds were issued "streets and bridges" stands first, accounting for 21 per cent of the total; but the improvement of public highways represented by this expenditure of seventy-odd million dollars was pretty largely confined to the cities. The plan of "state aid" for country road improvements has been adopted in more than half the states and is under consideration in most of the others.

Many counties, during the year, issued bonds for road improvement. Agricultural colleges, the Department of Agricultural twashington, and various

road improvement. Agricultural colleges, the Department of Agriculture at Washington, and various bodies are doing excellent educational work for better highways, but we still think the subject receives less attention than it deserves.

True, it is prosaic. No dramatic appeal to the imagination is possible on its behalf. Colorado, for example, floated \$11,000,000 of irrigation bonds last year and there are seen readily simplify the previous property.

year, and there one can readily visualize the new wealth that will spring from the investment. But to lessen the cost of country road haulage is tantamount to creating wealth. Very likely it is still true, as an investigation showed it to be in 1905, that the average cost of hauling a bushel of wheat over the short distance from the farm to the railroad station is almost half the cost of conveying it by rail from the station to the seaboard and more than half the cost of carrying it across the Atlantic; and the average cost of hauling a hundred pounds of cotton from the farm to the railroad is 16 cents.—Saturday Evening Post day Evening Post.

The Bison Rock Company has been incorporated at Buffalo, N. Y., to quarry and prepare for use all kinds of rocks, purchase and deal in real estate; capital, \$50,000. Incorporators: Daniel J. Perry, Chas. L. Graves, Augustus B. Kellogg, all of Buffalo, N. Y.

The Ohio & Indiana Stone Company announces the removal of its general offices, on July 1, from Indianapolis to Greeneastle, Ind.

WILL IMPROVE PLANT.

Mt. Pleasant, Ia., July 18.—William O'Connor has sold his stone quarries, three and one half miles south of the city, to a Cedar Rapids syndicate. The deal was made through E. K. Stall. A side track was made through E. K. Stall. A side track will be put in, stone crushers and other machinery installed, and the work of getting out dimension, building, crushed and all other kinds of stone will be commenced in the near future. It is understood that \$20,000 will be put in the plant.

INSTALLING CRUSHERS.

San Francisco, Cal., July 18.—The installation of stone-crushing machinery for the Yosemite Stone Company at Exchequer, Mariposa County, is progressing rapidly under the direction of E. N. Green-

leaf, the engineer in charge of the work.

When completed this crushing plant will be one of the largest on the coast. There will be four crushing batteries. The heaviest piece of machinery in the plant will be a No. 8 Gates crusher weighing 135,000 pounds. An immense locomotive crane, with a lifting capacity of ten tons, has been constructed for the company by the Union Iron Works, of San Francisco.

WILL IMPROVE QUARRIES.

Imboden, Ark., July 16.—Julius Hauck, of Decatur, Ind., will spend about \$8,000 in improving and enlarging the plant of the big stone quarries at Imboden, which he has just purchased from the Arkansas Stone & Iron Company. Mr. Hauck is a stone man of long experience, and will make a strong bid for business in this territory.

DESTROYED BY FIRE.

Salt Lake City, Utah, July 16.—The stone plant of P. J. Moran, at the Bamberger quarries, Ninth North and Second West, was destroyed by fire recently. It is estimated that the loss will exceed \$3,000. The plant was one of the newest of the P. J. Moran system, and had been idle for several

The city of Oakland, Cal., is in the market for a gyratory rock crusher.

H. Graham, of Houston, Tex., is considering the reopening of a rock quarry.

Bryan & Co., Jacksonville, Fla., are in the market for a second-hand rock crusher.

The pumping plant at the Thomasson rock quarry, near Suisun, Cal., was destroyed by fire recently, involving a loss of about \$4,500.

The Tomkins Cove Stone Company, Nyack, N. Y., has placed a mortgage of \$200,000 on its property, and the bonds are being offered for sale.

The Alabama Stone & Ore Company, Birmingham, Ala., W. G. Robinson, president, will operate a limestone quarry with a daily output of from 200 to 300 tons of limestone.

The Springfield Crushed Stone Company has been incorporated at Springfield, Mo., with a capital stock of \$5,000, by W. R. Kelso, George F. Knox and Nettie L. Kelso.

The Amador Limerock Company, of Jackson, Cal., has concluded negotiations whereby a large tract of lime rock has been secured, and exploration work will be started at once.

The Burlington stone quarry and crusher, located at Montrose, Ill., have been completed and started operations. When they get to running full capacity they expect to crush 300 yards a day.

The Kentucky & Tennessee Stone Company, organized at Bowling Green, Ky., to utilize the waste from quarries of the Bowling Green White Stone Company, will install crushing machinery.

The village stone crusher at Gouverneur, N. Y., has been put into commission. It is planned to crush between 600 and 700 cords of stone this season, which will be sufficient to make more permanent street improvements than has been done during any one season for many years.

C. W. Doubler, Madison, Wis., has formed a company at Dubuque, Ia., to purchase and handle what is known as the red rock quarries, a few miles from there, on the C., M. & St. Paul Railway. The different colored rocks are to be reduced to sand and shipped to all parts of the country for use in the manufacture of cement bricks, blocks, ornaments and any purpose for which cement is used.

BIRMINGHAM OPERATIONS.

BIRMINGHAM OPERATIONS.

Birmingham, Ala., July 18.—The Southern Bitulithic Company is engaged at the present time in the finishing of some very large jobs, among which might be mentioned: 100,000 yards of paving in Shreveport, La., a tremendous amount of bitulithic work in New Orleans, which has already lasted a year, 45,000 yards of bitulithic work at Corey, 45,000 yards of paving in Birmingham, 35,000 yards of paving in Ashland, Ky., and 12,000 yards of paving in Jackson, Miss.

At the last meeting of the city council ordinances

At the last meeting of the city council ordinances At the last meeting of the city council ordinances were adopted which provide for at least \$850,000 worth of paving work. All of the work is to be done on the south side of the city, and it is the purpose of the city authorities to go ahead as fast as possible. The ordinances adopted call for the following work: Caring of Eighteenth street from Avenue A to Eleventh Avenue, both brick and bitulithic being used in this work; the paving of Avenue E from Eighteenth to Twenty-fourth streets with vitrified brick; Sycamore street to Maiden's Lane; Arlington Avenue from Maiden's Lane to Highland Avenue; Beach Street from Highland Avenue to Sixteenth Avenue; Maplewood Street from Arlington Avenue to Sixteenth Avenue, with from Arlington Avenue to Sixteenth Avenue, with

The city engineer has advertised for bids for The city engineer has advertised for bids for brick paving, bitulithic, granitoid and rock asphalt, on the following streets: Twenty-first Street from Avenue Q to Avenue H, Twenty-second Street from Avenue H to Magnolia Avenue, Highland Avenue from Warsaw to Avenue G, Twenty-seventh street from Avenue F to Avenue G, Magnolia Avenue from Twenty-third Street to Five Points, Avenue D from Eighteenth Street to Twenty-first Street, Avenue Z from Eighteenth Street to Twenty-first, Avenue Z from Eighteenth to Twenty-third Street and Twenty-first Street from Tenth to Fifteenth Avenue.

Street and Twenty-first Street from Tenth to Fifteenth Avenue.

Many citizens of East Lake, a suburb of this city, attended the last meeting of the city council and protested against the paying of street improvement assessments on the ground that the work was not well done. They claimed, in addition, that the amount of slag and chert charged against them was way above the amount used, and they will carry the matter into the courts.

BEING DISMANTLED.

Three hydraulic cement mills in southern Indiana Three hydraulic cement mills in southern Indiana are being dismantled and the machinery will be sold for junk. The mills are those of the Golden Rule, the United States Cement Company and the Clark County Cement Mills. Plants of the Indiana Cement Company, the Standard Cement Company and the Gheens Mills, used for making hydraulic cement, were recently abandoned.

WESTERN PACIFIC PLACES ORDER.

Salt Lake City, Utah, July 19 .- The Western Pacific Railway Company has entered into a contract with W. L. & T. R. Ellerbeck, of this city, for the delivery of several tons of rock from the quarry, to be used in protecting the track across Great Salt Lake. This rock will be used in conection with the piling breakwater which will be constructed this

Hartford Stone & Construction Company, of Hartford, Ky., have increased their capital stock from \$1,800 to \$8,000.

The city council at Stuttgart, Ark., has determined on new street paving. The same will probably be of vitrified brick.

The Good Roads Construction Company, Bryd building, Memphis, Tenn., has a number of contracts in neighboring West Tennessee towns for street

Jonesboro, Ark., will widen its streets and engage in some street paving work. The board of improvement consists of G. W. Turner, John R. West and E. H. Mathes.

The Francisco Brothers Crushed Stone Company has been incorporated at Little Falls, N. J., to quarry, crush and mine stone; capital, \$100,000. Incorporators: J. Houston Francisco, Sherman G. Francisco, Ellsworth E. Francisco, all of Little Falls, N. J.

M. Larkin & Co., Madison avenue, Memphis, Tenn., were recently awarded the contracts by the city commissioners for paving Neptune Street from Tenn., were recently awarded the contracts by the city commissioners for paving Neptune Street from East Georgia to McLemore Avenue, with asphalt, for \$22,450, and Galloway Avenue from Dixon Street to McLean Boulevard, for \$12,263.

SECURITY PORTLAND CEMENT

(Annual Capacity 700,000 Bbls.)

BERKELEY HYDRATED LIME

(A 20th Century Product.

BERKELEY LUMP LIME

(Carbonate of Lime 98.28%)

For Building, Chemical and Agricultural Purposes.

BERKELEY RUN OF KILN LIME

(For Agricultural Purposes)

BERKELEY GROUND LIME

(Fresh Burned Lime Uniformly, Ground)

BERKELEY GROUND LIMESTONE

(For Manufacturing and Agricultural Purposes)

FLUXING STONE FOR BLAST AND OPEN HEARTH FURNACES

Silica Less than 1 Per Cent)

CRUSHED STONE

(All Sizes)

For Railroad Ballast, Boad Work, Concrete and General Building Work.

SECURITY CEMENT & LIME CO.

WESTERN OFFICES: OLIVER BUILDING, PITTSBURG MAIN OFFICES: EQITABLE BUILDING, BALTIMORE



SALES OFFICE:

THE

Standard Brands

OI

PORTLAND CEMENT

Lightest in Color Highest Tensile Strength

ALWAYS UNIFORM



SALES OFFICE: Long Bldg., Kansas City Always the same high quality. Prompt shipment guaranteed and made possible, as each mill is located within switching limits of the two greatest railroad centers of the West. You are assured of your orders being promptly filled.

MANUFACTURED BY

Union Sand & Material Co.

ST. LOUIS Liggett Bldg. KANSAS CITY Long Bldg. MEMPHIS Tenn. Trust Bldg.



RawMaterials

which are the best

obtainable are used in the manufacture of Universal Portland Cement. Granulated blast furnace slag, thoroughly uniform in composition and pure calcite limestone are combined in scientifically correct proportions, burned to a clinker in rotary kilns at a white heat and ground to an extreme fineness. These raw materials are peculiar to our process of manufacture and are used in America by this Company only.

Universal Portland Cement Co.

Chicago-Pittsburg

Annual Output 8,000,000 Barrels



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FOR UNDERWATER ENGINEERING WORK

For BRICK and STONE Mortar

UTICA HYDRAULIC CEMENT

BECAUSE IT IS THE BEST FOR THIS CLASS OF WORK

"NUFF SED"

"WE GUARANTEE EVERY BAG AND BARREL OF OUR CEMENT"

UTICA HYDRAULIC CEMENT CO.,

UTICA, ILL.



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MILL: Kosmosdale, Kentucky

Kosmos Portland Cement Co.

RELIABILITY

WAR DEPARTMENT

ENGINEER OFFICE, UNITED STATES ARMY.

Nashville, Tenn., February 20, 1909.

KOSMOS PORTLAND CEMENT COMPANY,

Louisville, Ky.

Dear Sirs:—Replying to yours of the 12th instant, I beg to advise you that our records show that 22,250 barrels of Kosmos cement were received at Hales Bar, Tennessee River, for the lock under construction at that point, between June 23 and September 25, 1908. All of this material was tested and all of it accepted under the requirements of the Engineer Department specifications. respectfully, respectfully, WM. W. HARTS, WM. W. Major, Corps of Engineers

A Destructive Fire Prevented the Completion of the 100,000 Barrel Contract. The Rebuilt Mill is Fire-Proof.

Department. A record of uniform acceptance, such as the above, is the best assurance to the purchaser of the unvarying quality of KOSMOS cement. It is a FACT—more convincing than any amount of TALK.

ASK FOR QUOTATIONS

Kosmos Portland Cement Co.



R

E SALES OFFICE:

N Paul Jones Building, Louisville

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Color of Superior

The color of a cement makes it pleasing or displeasing to the eye in the finished work. Superior has a light-gray color which whitens with age. This makes Superior Concretes a happy medium between the dazzling white and the dull gray. Its clear color is not affected by absorption, because it sets like adamant. Rain washes it clean. Booklet "C 7" tells how it is made, of what it is made, and why it will last for ages. Superior Endures.

Union Trust Building, Cincinnati, Ohio The Superior Portland Cement Co.



WATERPROOFING

Dopes come and go, but

"MAUMEE"

Is here to stay.

If you haven't used it, you will some day.

Write us for information, samples and prices.

THE MAUMEE CHEMICAL CO.

403 St. Clair Bldg. TOLEDO, OHIO

MEACHAM & WRIGHT COMPANY

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BRICK AND MORTAR

COLORING

Be sure you get the genuine with the "Little Yellow Side-Label" on each package.

Let us tell you about Side-Walk Bla k

Washed-Steam Dried and Screened

Ottawa White Sand

Unexcelled for

Facing Concrete Blocks Ornamental Concrete Stone White Plaster Roofing Exterior Plastering

Sawing Stone and Marble, Etc.

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Prices, Freight Rates and Samples on Application

You can order less than a car load, in fact Shipments as small as five 175 lb. bags can be delivered economically. Send an order for five bags and try facing your blocks with white sand. It will pay big.

The Only Standard Sand

Ottawa Silica Co.

Ottawa. Illinois

LARGEST SHIPPERS OF WHITE SAND IN THE UNITED STATES

Your Bag Repairing Reduced 90 %

Why bother sewing on patches, and then have stitches cear out, when by using

Little's Sac Paching Sement

You secure a permanent patch, better and more easily done.

It is applied with a brush. Time of mending and money saved.

Isn't that economy? Write for further particulars.

The C. H. Little Company, DETROIT, MICHIGAN

Contractors and Cement Manufacturers Need



Because they will earn excellent dividends on important concrete construction work by accurately measuring the cement, sand stone and water in correct proportions by weight. Because in a cement plant they will give absolutely accurate proportions of the raw materials before mixing, a

positive check on all coal received, the accurate weight of all coal dust delivered to kilns the exact amount of clinker produced, the correct proportions of clinker and gypsum, a positive record of finished cement delivered to stock bins, and, finally, the dustless, accurate and rapid weighing and packing of the finished product into bags.

Richardson Automatic Scales are the World's standard for Automatic Weighing—more of them are in this country than all others combined. Shall we send the catalog?

RICHARDSON SCALE COMPANY

7-8 Park Row, New York

122 Monroe St., Chicago

If It Looks Trim It's A Troy



As every mechanic knows, a trim looking machine is usually an efficient one. Compare the present day trim appearing automobile with the old time, cumbersome, cluttered up affairs, and you will see how much "looks" count in judging the merit of machines.

In the same manner the Troy may be contrasted with other dump wagons, and you will always observe that when you see a neat appearing, simple, trim wagon it is a Troy. Contrast that long tubular shaft on the Troy with the chains on other dump wagons for raising the bottom doors. Note the graceful lines and the general "air" of strength of the Troy. These "outward and visible signs" are a correct index of the whole character of a Troy wagon—simple, strong, serviceable. In these qualities it looks in vain for an equal.

Send for Catalog No. 2P and study the Troy dumping mechanism.

THE TROY WAGON WORKS CO.

101 East Race St.

TROY, OHIO

Tell 'em you saw it in ROCK PRODUCTS

Cleve expend nounce the mo buildin fore cc of Eas and wi 000 sq 000 sq 100 sq 1

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CLEVELAND BUILDING NEWS

Cleveland, O., July 20.—Structures involving the spenditure of several million dollars were an-Cleveland, O., July 20.—Structures involving the expenditure of several million dollars were announced in this city during the past month. One of the most important of these is the new Y. M. C. A. building, which will cost \$500,000 or \$600,000 before completion. It is to be erected at the corner of East 22nd street and Prospect avenue southeast and will be eight stories high. It will contain 45, 1000 sequent feet and will be one of the largest if and will be eight stories high. It will contain 45,000 square feet and will be one of the largest, if not the largest, Y. M. C. A. building in the world. It will be of steel and concrete construction, with brick walls and terra cotta or stone trim. The lot on which it will stand is 272 feet by 153 feet and it will be fully covered by the new structure. The first three floors will be given over to the educational, religious and business work of the association and the other floors above will be used for bedrooms. Hubbell & Benes, of Cleveland, are the architects. Bids will be called for during the month of August and it is now hoped that ground can be broken by September 1. The architects and directors of the association have been visiting association buildings all over the country in picking up ideas to inculcate into the new structure.

ciation buildings all over the country in picking up ideas to inculcate into the new structure. Plans were made public in Cleveland during the past few days for the erection of a mammoth storage warehouse on Ontario and Canal streets, with a four-acre site and over twenty acres of floor space. The Terminal Warehouse Company has been incorporated for \$2,000,000 and has already purchased its site, which is adjacent to two railroads. Architect Frank L. Packard, of Columbus, O., has prepared the plans for the various buildings, which will be built on the unit system, there being O., has prepared the plans for the various buildings, which will be built on the unit system, there being sixteen units in all. The buildings will be two stories underground and eight stories above. The buildings, of which there will be four, will be reinforced concrete with brick curtain walls. W. D. Guilbert, president of the Capital Trust Company, of Columbus, is president of the company. Frank C. Caine, of the National Fireproof Company, of Cleveland, and J. H. Fuller, of the Stowe Fuller Company, firebrick manufacturers, are the Cleveland men behind the project. The representatives of the company have been working for four years in gaining possession of the land. It is proposed to run eight or ten railroad tracks in on the lower level and hoist all goods to the various floors by means of great elevators.

level and hoist all goods to the various floors by means of great elevators.

A new \$90,000 building, containing what is claimed to be the largest dance pavilion in the country, is to be built by J. W. Holcomb and others on Euclid avenue near East 105th street. Architect George W. Griebel has prepared plans for it and work has already begun. It will have a frontage of eighty-five feet on the avenue and will be 260 feet deep. On the ground floor will be a large storeroom, with two large dance halls above. The building will be of concrete and brick construction. ing will be of concrete and brick construction, with a marble entrance and staircase. The structure is to be ready for occupancy by October 1

A new \$50,000 brick and concrete passenger station is to be built for the Lake Shore railroad at East 105th street by the Reaugh Construction Company. It will have a red tile roof and will be in an attractive style of architecture. The same firm has the contract for erecting the remainder of the part Plain Dealer building at a goat of party \$200.

has the contract for erecting the remainder of the new Plain Dealer building at a cost of nearly \$200,000. It will be six stories, 80x100 feet in size, stone being used for the first story and terra cotta resembling granite above. Interior construction will be of reinforced concrete.

A big reinforced concrete dam, 160 feet high and twice as wide, together with a big power plant, will be built to harness the Cuyahoga river at Akron, O. F. C. Whipple, chief engineer of the American Hydraulic Engineering Company, of New York and Chicago, has visited the location and reported on the feasibility of the matter. F. C. Downey, another engineer has also approved of the scheme. Plans have been prepared for the work, according to Downey. according to Downey.

The Raymond Concrete Pile Company, of New York and Chicago, has been awarded the contract for the foundation of Public School No. 2, at Stiles and Gough Streets, Baltimore, Md. Qtto H. Simonson, architect; Engineering Contracting Company, general contractors.

CONCRETE CONSTRUCTION IN LOUISVILLE.

Louisville, Ky., July 15.—Louisville has been a good field for the concrete worker for a number of years, and the popularity of this form of construction is increasing to such an extent that every firm in town which handles this character of business has all it can do. Concrete foundations, concrete porches, concrete supports, concrete walks are all in vogue, and the concrete man is one of the busiest in the whole construction field.

construction field.

The Central Concrete Construction Company reported good business, although the number of jobs in sight is perhaps not as large as it was this time last month. It has finished the work of building a concrete wall around the Cave Hill cemetery, which was one of the biggest undertakings of the kind handled here in a long while. The company's equipment consists of three Hayden automatic block machines, two Peerless brick machines, one Jaeger continuous mixer and two Jaeger batch mixers. All of them are giving fine satisfaction. satisfaction

Robert Morris, president of the Central Concrete Construction Company, is promoting the organization of a company for the manufacture of automobiles. He has succeeded in interesting several local capitalists, has succeeded in interesting several local capitalists, and it is likely that the project will go through. Although not an active member of the firm, Mr. Morris maintains his connection with it. P. S. Hudson and T. M. Wintersmith are in active charge of the plant.

The Culley Cement Block Company has completed a

big job at Gethsemani, in Nelson county, and is fig-uring on a lot of additional work. Mr. Culley reported

uring on a lot of additional work. Mr. Culley reported business very good. The company will add a department for the manufacture of porch columns, concrete columns being a strong favorite in Louisville.

The National Roofing & Supply Company is doing a lot of concrete work, including a big 36-foot porch for the Home for the Incurables; floors and steps for a parish house on Walnut street; floors for the new public bath-house; and several smaller pieces of work. The force of workmen employed by the National is being kept busy, and the company looks for a continuance of favorable conditions.

The question of the aggregate to be used in making the Toundation of a street in New Albany, Ind., just across the river, was discussed so vigorously by the property owners there that the Board of Public Works finally had to give in and has specified that gravel be

finally had to give in and has specified that gravel be used instead of broken stone. The city engineer preferred that broken stone be used, saying that it would make a better concrete. The Board secured letters from engineers in other cities, however, approving the use of gravel, and it was consequently substituted.

BALTIMORE CONCRETE WORK.

Baltimore, Md., July 18.—There is considerable work in progress in Baltimore and a great deal contemplated. One of the most important bridges comtemplated. One of the most important bridges com-pleted recently is the new Edmondson avenue struc-ture over Gwynns Falls, about half a mile beyond the city limits. The bridge is a four-arched structure about 75 feet high and carries a double car line, team-way and two sidewalks across. It was crected by the way and two sidewalks across. It was erected by the Baltimore Ferro Concreto Company and was recently turned over to the city. Benjamin T. Fendall, city engineer, was the architect.

The Baltimore Ferro Concrete Company was recently awarded the contract to build four additional stories

on the large warehouse of the Western Maryland Rail-way Company at the foot of York street. The building is a large reinforced concrete structure and the first story is made of concrete blocks. The additional stories will be reinforced concrete. The improvements

will cost about \$100,000.

The Falconer Company, Gay and Water streets, will soon start work on its new concrete building. It will be a five-story structure of reinforced concrete, and will be one of the finest warehouse structures in the The building will cost about \$100,000.

MODERN CONCRETE WAREHOUSE.

MODERN CONCRETE WAREHOUSE.

Norfolk, Va., July 16.—The first of a series of fireproof storage warehouses to be erected by Jones & Company, on the property known as the Nottingham & Wrenn property, in Atlantic City ward, has been completed and is now nearly filled with goods. When the work is done Norfolk will have a group of water front storage warehouses suitable for all kinds of storage. The buildings are being erected of reinforced concrete throughout, and are absolutely fireproof in every sense of the word. Not a single block of wood has been allowed to enter into the construction, and every known precaution has been taken to eliminate the fire hazard. The building and group plan was worked out by

caution has been taken to eliminate the fire hazard. The building and group plan was worked out by Neff & Thompson, architects and engineers, who made a study of all similar developments in this country. They personally designed and superintended the construction of the building. The foundations were constructed after exhaustive tests of the capacity of concrete and piling, and have been

massively proportioned to sustain the maximum loads. The floors, outside-walls, roof, columns and girders are of reinforced concrete; all doors are of the rolling steel fireproof shutter type; all windows have metal frames with wire glass; all elevators and stairways are enclosed in reinforced concrete shorts. All power and lighting wiring her have year shafts. All power and lighting wiring has been run

in iron conduits.

The National Board of Fire Underwriters was In from conduits.

The National Board of Fire Underwriters was called into consultation before ground was even broken, and they assisted very materially in removing every objectionable feature from a fire hazard standpoint. They have promulgated a rate on the building already completed which is considerably lower than that ever before given on similar building in this city. buildings in this city.

NEW SWISS MACHINE.

Vice-Consul Eugene Nabel, of St. Gall, describes a new Swiss machine with revolving molds for shaping building blocks. Brick, clay, various mixtures of cement, sand, gravel, slag, sawdust, cork, etc., may be readily pressed into compact blocks with exact measurements, sharp lines and edges. All kinds of mixtures have been experimented with, the machine molding them into blocks which have successfully withstood the severest tests. Several different sizes of bricks or blocks may be turned out at the same time, and in series of ten of uniform ferent sizes of bricks or blocks may be turned out at the same time, and in series of ten of uniform size, every half revolution of the press producing five blocks. It may be operated by hand or motor power without special skill and by one person. It is unlike any machine on the market, cheap in price, operates without the sudden jars usually incident to such machines, and is durable. It occupies small space, is easily adjusted, and portable. In making bricks this machine dispenses with frames for drying, the process of molding hardening them. Photos of the invention, together with the name of the of the invention, together with the name of the Ohio firm which will construct them, may be obtained from the Bureau of Manufactures.

ST. LOUIS CONCRETE NEWS.

St. Louis Concrete News.

St. Louis, Mo., July 20.—The P. M. Bruner Granitoid Company, whose offices are in the Frisco Building and their plant situated near Theresa avenue, find business in sidewalk construction ruling rather quiet at present, but there is a demand for their patent sidewalk lights. A good order from Fort Dodge, Ia., has just been filled.

The Raymond Concrete Company, of New Jersey, with a home capital stock of \$1,000,000, is licensed to use \$10,000 of same in St. Louis.

The Hydrolithic Cement Company, located at New York City, with a capital stock of \$200,000, is licensed to transact business in Illinois with a state

licensed to transact business in Illinois with a state capital of \$10,000.

Standard Sanitary Flooring Company, Dover, Del., has been incorporated with capital stock of \$25,000. The new company will manufacture con-

L. Hilliard and A. B. Pomeroy have purchased tional machinery at Jackson, Tenn., for the additional machinery at Jackson, Tenn, for the manufacture of concrete blocks and cement or concrete shingles.

Highlands Cement Products Company, Davenport, Iowa, has been incorporated, with capital stock of \$1,000, by F. W. Downs, C. A. Moses, B. J. Shannon and Tillie M. Shannon.

Freeland & Woodley have purchased a cement tile machine capable of turning out tile at the rate of 3,000 per day, at Dumont, Iowa: Frank Beach has also started a cement block factory at the same

The contract for the concrete piles and founda-tions of the new Y. M. C. A. building to be erected at the League Island Navy Yard, Philadelphia, has been awarded to the Raymond Concrete Pile Com-pany, of New York and Chicago. Alexander Mackie Adams, architect.

The Raymond Concrete Pile Company, of New York and Chicago, has been awarded the contract for the concrete piles and foundations of the Bemis Brothers Bag Company's factory building at Ninth and Wyoming Streets, Kansas City, Mo. C. L. Gray Construction Company, general contractors.

J. W. Huling & Sons, of Schuylkill Haven, Pa., who are the proprietors of the Keystone Cement Works, are adding additional equipment to their plant, which will enable them to triple their capacity. They have been manufacturing concrete building blocks, for which they have found quite

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PROSPECTUS

Of the New York and Chicago Cement Shows Has Been Issued and Very Important Features Enumerated.

A 24-page prospectus is being distributed by the Cement Products Exhibition Company, 115 Adams street, Chicago, among the various concerns who have material for exhibition at the New York and Chicago material for exhibition at the New York and Chicago cement shows. The prospectus contains full information about these shows, the rules and regulations governing them, diagrams of spaces and prices of spaces. It is announced that the First Annual New York Cement Show will be held in Madison Square Garden,

Cement Show will be held in Madison Square Garden, December 14-20, 1910, and the Fourth Annual Chicago Show will be held in the Coliseum, February 17-23, 1911. The show at New York is the first venture in that city, but it is believed that the show there will prove quite as successful, if not more so, than the annual Chicago cement show.

Considerable progress has already been made in the preliminary arrangements. Various contracts have already been let in connection with the exhibition and by October 1 it is expected that every detail in ar-

by October 1 it is expected that every detail in arrangements for the show will be complete. Those who have been following the progress of the cement shows have been following the progress of the cement shows will be interested and glad to know that the National Association of Cement Users has decided to hold its seventh annual convention in New York during the cement show in December. The annual meeting of the Association of American Portland Cement Manufacturers will also occur in New York during the show.

The railroads have been petitioned for a reduction in rates for the big cement gathering and it is hoped that arrangements may be effected which will work out as satisfactorily as the reduced rate arrangements at the Chicago Show last year proved to be. There is some question, however, as to whether the Trunk Line Association, which comprises most of the lines running out of New York, will offer a reduced rate for the show. Each year finds the railroads less inclined to give the public a more attractive rate for the big trade shows. New York is easily accessible from all points in a large territory teeming with industries based upon the use of cement and the attendance at the New York show should enormously exceed even the large attendance at the Chicago exhibition.

Despite a general impression to the contrary, there is less exhibition space at Madison Square Garden than in the Coliseum in Chicago, and many prospective exhibitors are consequently awaiting with keen interest the allotment of space, which will not be made until September 1. While the Garden is considerably larger than the Coliseum in Chicago there is less actual September 1. While the Garden is considerably larger than the Coliseum, in Chicago, there is less actual available floor space for rent. The question of limiting the amount of space to be allotted any one firm has been considered by the management and it is quite probable that a restriction will be placed upon the number of spaces which a single exhibitor may lease. The Cement Products Exhibition Company has already promised that the New York show, as well as the next Chicago show, will have a somewhat different aspect from previous cement shows. Practically all those who expect to exhibit are already making plans

who expect to exhibit are already making plans

for elaborate and artistic displays. It is expected, too, that there will be some change in the general character of the exhibitors. Many of the larger construction companies have become interested in the possibilities of the show and as a result will have on display some most unusual and valuable exhibits, with the idea of interesting the business man and the public generally in the advantages of reinforced concrete construction.

construction.

The cement shows each year in the past have shown vast improvement over each preceding one. The well-nigh intolerable aggregation of dirt, dust and noise-making machinery, which was once called a cement show, is now giving way to beautiful and expensive effects in ornamental concrete, splendidly installed among artistic and costly decora

tions.

It is confidently expected that the shows next winter will gratify the æsthetic tastes of the most discriminating audiences. In issuing the prospectus, the Cement Products Exhibition Comences. pany prints the following foreword:

foreword:

"In placing this booklet in the hands of the
prospective exhibitors at
the New York (1910) and the Chicago (1911) Cement Shows, we take the opportunity to thank the many concerns and individuals whose generous support during the past three years has brought the cement show into the front rank among the country's great industrial exhibitions.

"The enthusiastic cooperation displayed at the Chicago show has encouraged us to undertake the management of an additional show in the East. In assuming this responsibility we confidently rely upon the same support which has made possible the past suc-

"We trust that the arrangements for the coming New York and Chicago Cement Shows outlined herein will receive the approval of every exhibitor. In drawing up the rules and regulations under which the cement shows will be held, and in all details respecting the conduct of the exhibitions, the general good of the greatest number of exhibitors has been kept constantly



MADISON SQUARE GARDEN, NEW YORK

THIRD ANNUAL CONVENTION AND CEMENT SHOW.

The third annual cement show of the Oklahoma Cement Users and Contractors' Association will be held during the entire thirteen days of the State Fair at Oklahoma City, September 27 to October 9, in the new Cement Industries building, which is now being constructed by the State Fair Association. The building will be 60'x160', light and airy, and will have a cement floor. Parties desiring space for exhibits should write to E. A. Mossman, assistant secretary, at once.

ant secretary, at once.

The third annual convention of the Oklahoma Cement Users' Association will be held in Oklahoma City October 6, 7 and 8, during the State Fair.

The Kahoka Cement Products Company, of Kahoka, Mo., has moved into its new location, and is manufacturing all kinds of cement products with great success



The American Well Works, Aurora, Ill., have recently issued Bulletin 115, which is in the form of a handsome catalog of their American Air Compressors. They say, "For many years an important part of our business has been the man-ufacture of air compressors. At the present time, low first cost, in many in-stances, seems to be a more important consideration than strength and durability of the machine, and some compressor manufacturers have reduced the weight to meet this condition. We have always main-tained that no machine is cheap if it fails to give tained that no machine is cheap if it fails to give satisfaction to the user, not only as a new machine but after years of constant operation. For this reason we are continuing to make our compressors fully one-third heavier than many of equal rated canaeties. equal rated capacities.

WEST COAST CONCRETE CONSTRUCTION.

San Francisco, July 16.—June has been a decidedly poor month for the building trades in San Francisco, the valuation of permits amounting to only \$2,216,631, which is materially below the record for June of the two years preceding, and is lower than either April or May of this year. This lower than either April or May of this year. This condition is very disappointing, as work has been rather slack all spring, and some improvement was looked for during the summer. The immediate outlook is not very encouraging, though a good many temporary structures are now being torn down to make way for something more permanent. Business men are complaining of high rents, and owners of office buildings are still finding difficulty in getting tenants, a condition which tends to delay new projects indefinitely. There is a prospect, however, of a good deal of public work in the next year or projects indefinitely. There is a prospect, however, of a good deal of public work in the next year or so. The class C type of building predominates here at present, and concrete is still about the most favored material. The extreme activity in other coast cities has quieted down, though there is a normal amount of work at the principal points, and a good many permanent warehouse and shop buildings are going up at country points from which no report is received.

Considerable concrete work is being done in your considerable concrete work in the considerable considerable concrete work is being done in your considerable concrete work in the considerable considerable concrete work is being done in your considerable consider

Considerable concrete work is being done in various parts of the state in connection with new reservoirs and oil storage projects.

The Healy-Tibbitts Construction Company is starting work on the large reservoir for the San Francisco fire protection system on Twin Peaks, for which the contract was let some time ago. A contract was let a couple of weeks ago for a large reservoir at Pleasanton, Cal., for the water system. Concrete is apparently a success for holding crude retrolumes many large reservoirs have heap given. Concrete is apparently a success for holding crude petroleum, as many large reservoirs have been giving satisfactory service in this connection for several years, and new ones are now being built, on account of the heavy overproduction of oil. A contract has just been placed by the Producers' Transportation Company for two reservoirs near San Luis Obispo, Cal., to cost about \$125,000 each. They will be built above ground, 20' high and 600' in diameter. The walls will be 6" thick at the top, 12" at a height of 10', and much thicker below. The company is planning to put up similar reservoirs at several other points along its pipe line.

Sewer work continues active all over the state,

Sewer work continues active all over the state, though San Francisco is the only city in which any over the state. great amount of concrete sewers are being laid. The plans for the larger mains have not all been carried out by any means, and several large contracts have been let within the last month. The Healy-Tibbitts Construction Company has taken the contract for section A of the North Point sewer, one of the largest mains, at \$164,300, and the Seventh street sewer work was awarded to the Metro-politan Construction Cempany at \$159,000. All the larger sewers are being constructed of reinforced concrete lined with vitrified brick, and it is be-lieved that they will be much more satisfactory and

lieved that they will be much more satisfactory and permanent than the old sewers of common brick, in which defects were continually developing.

One of the largest winery plants in California is now being built on the vineyard of M. F. Tarpey, near Fresno, Cal. The structure will have a floor area of 200' by 200', and will be 24' high, entirely of reinforced concrete. Walls and columns will be 12" thick, and the roof will be of the tar and gravel type. The main building will be in the California Mission style, to which concrete is well adapted, Mission style, to which concrete is well adapted, with a 50' tower rising from the center. A concrete distillery, 80'x104', will also be built. Another San Francisco seawall contract has been

awarded, the Mercer-Frazer Company getting the job on Section 10 at \$119,400. The city of Oakland has its waterfront improvement plans practically complete, and work will probably be started within a few months. The extent to which concrete is to figure in these improvements has not been announced, but concrete piers and piles will probably

be used in much of the new wharf construction.

The Thompson-Starrett Company, which has the contract for a large bank building at Sacramento, Cal., is driving solid concrete piles for the foundation. It is claimed that this is the first case in California where such piles have been driven for foundations, those formerly used being of the Simplex type.

Simplex type.

The Ransome Concrete Company is working on a contract for concrete shop buildings for the Western Pacific railroad at Sacramento, Cal.

Considerable concrete construction is in progress at Richmond, Cal., where large shops are being built for the Pullman Company. Since the first contracts were let instructions have been received to add a number of buildings not called for in the original number of buildings not called for in the original plans. The Western Pipe & Steel Company is also planning a large factory, to be erected at Richmond The Silex Concrete Construction Company has been incorporated at Los Angeles, Cal., with a capital stock of \$25,000, by P. C. Balcor, D. L. Hough, H. L. Mack, James Cramer and Clarence

The Puget Sound Construction Company is planning to start a factory at Birmingham, Wash., for manufacture of concrete blocks.

The California Corporation, which controls the Mokelumne irrigation system in northern San Joaquin county, Cal., is putting in a large number of new headgates and bridges, all of which are being

made of concrete.

A large concrete swimming pool, footbridges, etc., are to be built this fall on the University of

California grounds at Berkeley, Cal.
Contracts were recently let for structural work
on a large concrete court house at Fairfield, Cal. T. J. Downing, of Ashland, Ore., has sold a half interest in his cement construction plant to James Wiley. A lot of new machinery will be put in operation.

TWIN CITY CONCRETE CONSTRUCTION.

Minneapolis, Minn., July 18 .- The American Con-Minneapous, Minn., July 18.—The American Concrete Company, of Chicago, recently shipped machinery and outfit from Fort Smith, Ark, to Belle Plaine, Minn., where it has begun the manufacture of concrete culverts for the Chicago & Northwestern railway.

The Le Roy Cement Culvert Company, of Le Roy, Minn, has been formed to handle a sectional con-crete culvert, the invention of Gilbert Mahoney and Frank A. Rounds.

The recent fire at Seventh Avenue South and Third Street, Minneapolis, which burned two seven-story buildings, one five-story, and damaged every building on the square, has caused more attention building on the square, has caused more attention to be paid to the matter of fireproof construction. The owner of the two seven-story structures which were burned, A. S. Wright, of Alma, Mich., has decided to rebuild them in a single structure of reinforced fireproof concrete. The building will be seven stories high, 118'x154' in size, with pressed brick exterior walls. brick exterior walls.

Revised plans have been prepared for the pro-posed twelve-story family hotel building to be erected in Minneapolis at the corner of Third Avee South and Tenth Street, by Theo. F. Curtis, Minneapolis, and Frank Mackey, of London, ag. The building will be of reinforced concrete construction throughout, and the cost is placed at

The Business League, of St. Paul, proposes the rate Business League, of St. Paul, proposes the erection of a building to afford space for small manufacturing plants, with power, to be called the Power building. A reinforced concrete structure is proposed, to be 96'x280' in size, seven stories, with 190,000 square feet of floor space. Cost, about \$225,000

The Northwestern Telephone Exchange Company has plans for rebuilding and enlarging its main exchange building at Fifth and Cedar streets, in St. Paul. An extension will be built to the present St. Fain. An extension will be built to the present building, after which the original structure will be torn out and rebuilt. The foundations will be put in to bear a six-story structure, 100'x85' in size. It will be of reinforced concrete construction, with pressed brick exterior walls. A sub-exchange will also be erected in the Midway district, to cost \$15,000. The main exchange and equipment will cost about \$350,000.

The Tri-State Telephone Company has had plans drawn by Buechner & Orth, architects, St. Paul, for an addition to its main exchange at Eighth and Cedar Streets, St. Paul. It will be of reinforced

Cedar Streets, St. Paul. It will be of reinforced concrete construction, two stories, 50'x67' in size. The Hotel Dyckman, Minneapolis, which has but recently opened for business, with a structure costing a million, is already looking forward to enlarging its building by the erection of a twelve-story addition on the west, and later by additions on the east, increasing the rooms to 590. The building is of reinforced concrete construction, and the additions will undoubtedly be of the same construction.

tions will undoubtedly be of the same construction.

George Benz & Sons, St. Paul, have had plans
prepared by Buechner & Orth, St. Paul architects, for a new theatre building, to be known as the Empress, which is to be erected on an interior site in the block bounded by Wabasha, St. Peter, Ninth and Exchange streets, St. Paul. There will be areade entrances from both Wabasha and St. Peter streets, and the present stores fronting on Wabasha Street will be remodeled. The building will be of reinforced concrete construction. The work planned for this season will cost about \$80,000.

The Minneapolis Transfer & Storage Company

has arranged for the erection of a reinforced con-crete warehouse on Girard Avenue South, near Twenty-ninth street. It will be four stories, 90x116

feet in size, with brick and stone exterior walls.

Cost complete, about \$100,000.

The Russell Grader Manufacturing Company, of Minneapolis, was recently burned out at its plant in southeast Minneapolis. A new site has been secured at Twenty-third Avenue Southeast and University, upon which a set of brick buildings with reinforced concerts floors will be granted conserved.

reinforced concrete floors will be erected.

Henry E. Green, architect, of St. Paul, has prepared plans for a theatre building, to be erected at Crookston, Minn., by A. J. Paul. It will be 663'x110' in size, tapestry brick and Bedford cut stone trim-

in size, tapestry brick and Bedford cut stone trimmings, concrete slab floors. Cost, \$40,000.

The Lowry Building Company, of St. Paul, is having plans completed for rebuilding the Lowry Arcade at Fifth and St. Peter streets. It will be 50'x300' in size, seven stories high, with foundations to carry twelve stories, reinforced concrete construction throughout. Cost, \$750,000. Kees & Colburn, of Minneapolis, are the architects.

The O'Donnell Shoe Company, of St. Paul, has had the contracts awarded to Butler Bros. for the erection of a new reinforced concrete factory building at Tenth and Sibley streets, St. Paul. It will be seven stories, 60'x160'. Cost. \$90,000.

erection of a new reinforced concrete factory building at Tenth and Sibley streets, St. Paul. It will be seven stories, 60'x160'. Cost, \$90,000.

W. A. Fisher, proprietor of the Waverly Hotel, Minneapolis, a family hotel, has had plans prepared for an extension to the building, to be erected next year. The addition will increase the rooms from 90 to 225. It will be of reinforced concrete construction 667125 foot in size and will next \$60.000. tion, 66x125 feet in size, and will cost \$80,000.

Buechner & Orth, architects, of St. Paul, have plans in preparation for a handsome court house building, to be erected at Ellendale, N. D. It will be two stories and basement, of reinforced concrete construction, 70x100 feet in size, brick and stone exterior walls, etc. Cost, \$100,000.

SPRINGFIELD CONCRETE NEWS.

Springfield, Ill., July 20.—With \$150,000 worth building permits issued in June in Springfield, steady trade for building materials is noted.

There are no large projects.

A building permit has been issued for a \$136,000 reinforced concrete warehouse for Jobst, Bethard & Co. Another for the new Washington School in

& Co. Another for the new Washington School in that city, to be built of tile and stone, with reinforced concrete floors. It will cost \$76,000. V. Jobst & Sons, of Peoria, have both contracts.

The Newton Engineering Company, of Milwaukee, has been given a contract to replace the dam which has stood across the Rock River at Rockford for fifty-seven years with a new concrete monolithic structure. The contract price will be between \$25,000 and \$30,000, and as it must be completed before January 1, work will begin at once. The structure will be 535 feet long, and will conform to a 100-foot section already in place on the east end. Iron rods running from the bed rock will reinforce the concrete. Daniel W. Mead, formerly of Rockford, will have charge of the work for the Milwaukee concern.

Reinforced cencrete is called for in the contract

Reinforced cencrete is called for in the contract let for five factory buildings by the Davis-Weyer-haeuser-Denkman interests, owners of the Rock Island Plow Company at Rock Island, to Valentine Jobst & Sons, of Peoria. The estimated cost of the structures is between \$250,000 and \$300,000. These but part of the buildings which are to be erected within the next three years, at a cost of \$500,000, the company rebuilding its entire plant. The plow company will buy the materials and work will be under the supervision of C. D. McLane, now with

the manufacturing concern.

The Illinois Cement Construction Company, of Springfield, landed the contracts for paving Clinton, Superior and part of Center, Ottawa streets, for \$68,770.61.

A modern concrete entrance to the Illinois State Fair Grounds at Springfield will be constructed, at a cost of \$7,000. W. M. Howard, of Springfield, has the contract for the work; also for \$2,000 worth of brick improvements in the Dome building.

J. R. Richardson has opened a concrete tile fac-tory at Medora. He expects to begin with an output of 5,000 tile a day. Peter Simons, of Quincy, with an offer of \$20,688, was the lowest of eight bidders in the Bushnell, Ill., sewer contract.

Wolf, of Alton, has been awarded th

contract for paving Danforth street, in that city. The job is worth about \$16,000. The Woodland Clay Company, of Woodland, with The Woodland Clay Company, of Woodland, with stockholders in that village and at Watseka, has been organized with a capital stock of \$50,000. The company proposes to manufacture drain tile, brick, terra cotta and other materials on a large scale. The Anderson Tile Works, in Woodland, has been taken over, and the plant will be entirely rebuilt and new machinery added. Three switch tracks, to accommodate forty cars, are planned. The officers of the concern are: President, John W. C. Anderson, Jr.; vice-president, Victor Payson; ecretary, Homer Fleming, and treasurer, William

Bert Seymour, of Litchfield, has the contract to do the concrete work on the new American Radiator Company's plant in that city.

WILL DOUBLE CAPACITY.

Waterloo, Ia., July 16.—Since last fall the Waterloo Cement Machinery Corporation has built a fire-proof brick office building on the east side of the city, where its shops are located. It is 80'x60' and city, where its snops are located. It is so not and was completed a little over a month ago. This corporation contemplates building a concrete and steel building 42'×160'. Ground will be broken probably early this fall and the building completed by Dec. 1, next. This building will be used for an erecting the superior of the probability of \$20'×190'. shop adjoining its present shop, which is $80 \times 120^\circ$. This will double the capacity of the company at the present time. L. H. Weideman, manager of the corporation, stated that four times the number of orders for Polygon mixers had been received this year, covering the corresponding period of last

ARTISTIC CONCRETE RESIDENCE.

We are reproducing on this page one of the most artistic concrete residences that we have yet seen. While it is comparatively simple in design, it is without doubt one of the best types of home construction. It shows what can be accomplished by the use of concrete tile made by the Pauly process. It is the residence of P. Austin Tomes, manager of the Publicity Department of the Atlas Portland Company and it is located in Woodmere. Cement Company, and it is located in Woodmere, L. I. Alfred Hopkins was the architect, and de-serves great praise for his artistic design.

CONCRETE LAWN ROLLER.

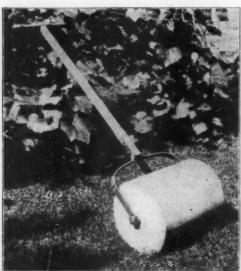
The concrete lawn roller shown in the illustration was built in accordance with directions in "Concrete Construction About the House and On the Farm," one of the numerous books issued by the publicity department of the Atlas Portland Cement Company. It is 12 inches in diameter and 17 inches long. A piece of sheet iron was cut to the proper size and bent to the proper shape and held in place by wirings. A %-inch gas pipe was inserted in the rollet to project through ¼ inch on each end. When set, a %-inch rod was placed through the pipe and threaded on each end to receive the nuts. An old lawn mower handle was secured, the ends bent out to the proper length. It weighs 175 pounds, and its cost complete, including all materials, was \$1.15. The concrete lawn roller shown in the illustration

This lawn roller was built by H. V. R. Palmer, of Dumont, N. J.

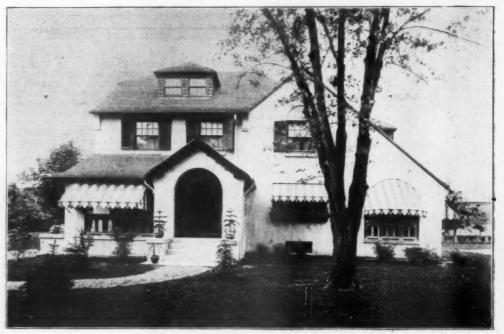
There are many other interesting implements about the farm and house that can be built of con-

NEW RULING BENEFICIAL.

Amarillo, Texas, July 15.—Concrete contract men are busy on account of the order issued from the city council to the effect that all streets or parts of streets to be paved must have curb fourteen feet wide and that all streets in the strictly resi-



CONCRETE LAWN ROLLER, BUILT BY H. V. R PALMER, DUMONT, N. J.



RESIDENCE OF P. AUSTEN TOMES, WOODMERE, L. I.

dential districts must have curb removed sixteen feet from the property line.

There is another phase of this ordinance worthy of consideration, which is that all sidewalks in the residential district shall be five feet wide at the lowest. Many of the old sidewalks will have to be removed or widened.

BUILDS CONCRETE SHOP.

Auburndale, Mass., July 19.—F. W. Fletcher has built a concrete shop on Johnson Place, and will use it for the manufacture of concrete blocks.

FORMED PARTNERSHIP.

Camden, N. Y., July 18.—George E. Deck and William E. McGillis have formed a copartnership here for the manufacture of concrete blocks. They expect to soon be prepared to do all kinds of cement

WILL MANUFACTURE CONCRETE BLOCKS.

Springfield, Mass., July 20.—Charles Vaninetti has leased a strip of land on the Cope farm on which he will put up a building to be used in the manufacture of concrete blocks for building purposes. He has had good success with his undertaking in this line at his home on South Prospect Street.

MEDFORD'S NEW INDUSTRY.

Medford, Wis., July 19.—Herman Neeck, of Little Black, Wis., has rented the basement of the Hartwick Building and has begun the manufacture of cement blocks. This is a new industry here, and we wish Mr. Neeck success.

CEMENT FROM FRANCE.

Austin, Tex., July 17 .- The company which has the contract for rebuilding the great dam across the Colorado River here, at a cost of \$1,000,000, has let the contract for 50,000 barrels of cement to be used in the structure, to manufacturers of cement in France. It is said that a lower price was obtained. The construction of the dam will actively begin in

BUSINESS UNUSUALLY GOOD.

Milwaukee, Wis., July 18.—Sam Shafer, Jr., of the Milwaukee Concrete Mixer & Machinery Company, had the following to say regarding the business situation: "Our business has been unsually good this season, as we have disposed of a great many more mixers than we anticipated, and our factory has been running full capacity all the time. We have just made a shipment of a carload of mixers to Winnipeg during the past week, and a carload to Minneapolis. Also a number of single machines to other cities."

BUILDING ADDITION.

Ft. Wayne, Ind., July 19.—Manefee Art Stone Company is building a 50-foot addition to its plant,

to take care of its rapidly increasing business. This concern only commenced operations two months ago, and has found the extra room a necessity already. The Menefee Company has been turning out a new block, using marble for an aggregate.

The Dakota Portland Cement Company, which the Dakota Forkland Cement Company, which has its headquirters at Sioux Falls, S. D., has let the contract for the construction of their plant near Chamberlain to the Freeborn Engineering & Construction Company, of Kansas City, Mo. Work on the new enterprise will be started in a very short

The Utah Glazed Cement Pipe Company, of Salt Lake City, Utah, has been incorporated, with capital stock of \$100,000. The officers of the company are N. L. Morris, president; George Q. Morris, vice-president, and Heber M. Wells, treasurer.

The United States Portland Cement Company is rapidly completing the \$125,000 extension to its plant at Concrete, Colo. They will shortly begin the erection of concrete block houses for the use of the company's employees.

THE UNIVERSAL NOZZLE.

Among the many improvements made and devices introduced in connection with quarrying stone in the Indiana colitic limestone belt none has saved more labor, time and money than the Universal Turret Nozzle for stripping and washing a ledge. It is recognized there as the only economical and practical method.

method.

This turret nozzle requires no hose whatever in its operation, as it is connected direct to the pipe line from the pump. It is universal in movement and one man can operate it, however great the pressure may be. It can not get out of repair, except that the turret joint may need repacking perhaps once or twice a year and takes but a few minutes' time. Having no ground joints there is no wear except on the packing. It does not have to be staked or anchored down and can safely be operated under high pressure. While it is usual to have a man in constant attendance on the nozzle, it is not necessary, as the play-pipe will remain is usual to have a man in constant attendance on the nozzle, it is not necessary, as the play-pipe will remain in whatever position it is placed. The size in general use in the Indiana colitic stone belt is the style "A," with 4-inch diameter inlet using a 1½-inch or 1½-inch discharge tip and at pressures varying from 80 to 140 pounds per square inch. The cost of stripping runs from 3 to 5 cents per cubic yard. The soil in this belt is a hard, red clay usually full of roots and spalls.and considered very hard to strip.

considered very hard to strip.

In Bloomington this nozzle has been used in stripping by the Chicago & Bloomington Stone Company for three years and W. H. Johnson, one of the officers of the company, said they found it impossible since then to do without it.

H. H. Woolery, general manager at the quarries of the Hunter Valley and Mathers Stone Companies, says that they wash dirt out from between the seams where

they coused the At B Bedford Red St below w The Ind., w in recei they ing

JULY 2

The 1 tural pu adopted terests tries wl have re-We ill Massach It is a 45,900 h proper a fluctuati

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An inte shown by Ill., a sul village a fountain entire wo village. which res in diamet supportin in diamet some 10 upon the streams, troughs.

they could not get it out any other way. They have used this nozzle for stripping since 1907.

At Bedford, E. E. Dickinson, superintendent of the Bedford Quarries Company, and Robert Reed, of the Red Stone Company, say this nozzle has given great satisfaction and decreased their stripping expenses far below what they believed was possible.

The Universal Nozzle Company, of Indianapolis, Ind., with offices in the Commercial Club building, is in receipt of many inquiries and orders. Last spring they installed this nozzle in quarries No. 1 and No. 2, which were lately opened by the Furst-Kerber Cut Stone Company, of Bedford, and it is doing great work. work.

CONCRETE IN NEW ENGLAND.

The use of concrete in New England for structural purposes is steadily gaining ground. In the last year or two, concrete construction has been adopted by many of the large manufacturing interests of New England. The great textile industries which are located in the environs of Boston have recently begin to use the new fireproof type.

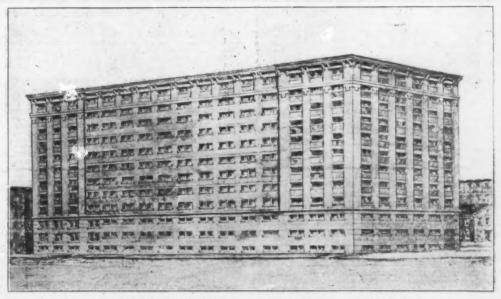
tries which are located in the environs of Boston have recently begun to use the new fireproof type of factory construction.

We illustrate the new \$300,000 storage house of the Massachusetts Cotton Mill, located at Lowell, Mass. It is a cotton storage house with a capacity of 45,000 bales, holding a year's supply for the mill proper and thus insuring the mill's immunity from fluctuations in cotton values, together with the advantage of having it in a fireproof building.

This new storehouse is somewhat of an innovation in the ideas that are the best in this particular line. It is to be twelve stories high in place of

tion in the ideas that are the best in this particular line. It is to be twelve stories high in place of the usual one-story broad area storehouses formerly used in New England manufacturing centers. The dimensions are 100 feet by 256 feet on the ground and 100 feet are twelve stories high. The construction is of the mushroom type of reinforced type, and Edison Portland cement has been specified for the ight. the job.

In addition to the fireproof qualifications of the entire concrete construction, each floor of the house is fitted with automatic water sprinklers and the



STORAGE HOUSE OF MASSACHUSETTS COTTON MILL AT LOWELL, MASS.

concrete lamppost bearing a 12-inch electric light concrete lamppost bearing a 12-inch electric light globe. Two other drinking fountains are also pro-vided on the circumference of the mound midway be-tween the horse troughs. On each side of the stand-ard of the central fountain is a mask of "Pan" with head wreathed in wheat mingled with leaves of oak and vine, a tribute to field, forest and garden. The work was designed by John Paulding, a Chicago sculp-tor, and was executed by R. Bertolm.

Universal Portland cement was used exclusively in

C. O. Bartlett & Snow

orders from Mexico are increasing and we are getting some trade from South America.

WHEN A MAN IS A FAILURE.

When he has no confidence in himself nor his fellow men.

When he values success more than character and self-respect.

When he does not try to make his work a little better each day.

When he becomes so absorbed in his work that he cannot see that life is greater than work.

When he lets a day go by without making some one happier and more comfortable. When he tries to rule others by bullying instead

of by example. When he values wealth above health, self-respect,

and the good opinion of others. When he is so burdened by his business that he finds no time for rest and recreation.

When he loves his own plans and interests more than humanity.

When his friends like him for what he has more than for what he is.

When he knows that he is in the wrong, but is afraid to admit it.

When he envies others because they have more ability, talent, or wealth than he has. When he does not care what happens to his neighbor or to his friend so long as he is prosperous.

When he is so busy doing that he has no time for smiles and cheering words.—[Chicago Tribune.]



GENERAL VIEW OF FOUNTAIN.

floors are pitched so as to carry the water off in case the sprinklers are started, thus reducing the possibility of damage to the cotton from this source. Two electric elevators will carry the freight from te basement to the roof.

The building is being constructed under the de-

sign of Lockwood, Green & Co. and is being constructed by the Aberthaw Construction Company, of Boston, Mass. It marks a progressive advance in the New England ideas, as well as making a wide growth of concrete construction in that section of the country, where factories are most costly and numerous.

A CONCRETE FOUNTAIN IN A CHICAGO SUBURB.

An interesting display of public spirit was recently shown by the citizens of the village of Park Ridge, Ill., a suburb of Chicago. Here in the center of the village a very beautiful and useful reinforced concrete fountain has been erected by public subscription, the entire work having been done by inhabitants of the village. As shown in the illustration, the fountain, which rests upon a mound, consists of a basin 14 feet in disputer, from which arises a six-sided standard. in diameter, from which arises a six-sided standard, supporting a beautiful curved fountain bowl six feet in diameter. From this bowl is to rise a jet of water some 10 feet in height, which, returning, will fall upon the upper bowl of the ground basin in six broad streams. At the two ends of the mound are watering troughs. At the back of each trough is a decorated N. ing Company, Thetford Mines, W. P. Q., Canada, one special Common Sense Pan Conveyor, 250-ft. centers. Capacity,

150 tons of asbestos rock an hour. Indiana Steel Company, Chicago, Ill., two Dolomite Elevators.

American Reduction Company, Pittsburg, Pa., andensers for new fertilizer plant at West Moreland. Pa.

National Carbon Company, Cleveland, O., elevating and conveying machinery.

Washington Fertilizer Company, Washington, D.
C., special garbage disposal machinery.

Pennsylvania Salt Company, Philadelphia, Pa., elevating and conveying machinery.

Flint Power Syndicate, Jackson, Mich., coal and ash handling machinery.

ash handling machinery.
Owens West Virginia Bottle Company, Fairmont,

W. Va., one car haul and hoist. Caxton Building, Cleveland, O., one elevator for

handling ashes. Electric Bond & Share Co., New York, N. Y.,

triumph coal crushers.

Diamond Rubber Company, Akron, O., two drop forge chain conveyors for conveying tire core, 120foot centers.

Gould Paper Company, Lyons Falls, N. Y., coal handling machinery.

New York Sanitary Utilization Company, New York, N. Y., garbage disposal machinery. We are receiving quite a number of orders for paint machinery, also for crushers and shellers. Our



DETAIL VIEW OF HORSE TROUGH.



ANNUAL MEETING.

Of the American Society for Testing Materials, Held at Atlantic City, Proves Interesting and Instructive.

The annual meeting of the American Society for Testing Materials was held at the Hotel Traymore, Atlantic City, N. J., June 28 to July 2. Again the society exceeded all former similar occasions in the number of attendants, which totaled a little over 300, and of this number some fifty were ladies, the wives and daughters of the members, who joined to make the meeting have something of the features of a summer outing.

Dr. Henry M. Howe, president of the society, was the leader of most of the meetings and the cream of the engineering talent of America discussed the various papers and committee reports and the great movement of standardization of building materials and the structural methods were distinctly ad-

The indefatigable secretary, Prof. Marburg, took care of the infinite details of his office by the able assistance of a staff selected from Pennsylvania

care of the infinite details of his office by the able assistance of a staff selected from Pennsylvania University classmen.

Vice-President Robert W. Lesley presided over the memorial services which were held in commemoration of the life and work of Dr. Charles B. Dudley, deceased, who for several years had been the leader of the society in the capacity of its president. This meeting was one of touching pathos, dignified and inspiring to all of the men who were there. Mr. Lesley's opening remarks were characteristically to the point and made the feeling of the session what it should be at the opening. One after another of Dr. Dudley's most eminent friends and admirers arose and spoke words in culogy of the great departed, as a railroad man, as a chemist, as a meteorologist, as a mentor, as a citizen and last of all a personal tribute. It was an inspiration to hear the words of men, who themselves are most eminent in their respective lines of study, to crown the memory of one whose work has

an inspiration to hear the words of mean, was them selves are most eminent in their respective lines of study, to crown the memory of one whose work has done so much for the standardizing of materials for the great American Society.

The session devoted to cement and concrete was held on Thursday, June 30, at 10 a. m. Henry S. Spackman, of the Spackman Engineering Company, of Philadelphia, Pa., read a very interesting paper on the subject of "Aluminates: Their Properties and Possibilities in Cement Manufacture." The paper was illustrated by means of a chart, showing the results of comprehensive tests which have been conducted at the Spackman laboratories for the past several years. The quickening influence of aluminates, especially calcium aluminate, which he has manufactured under the name of "Alca," so interesting to cement engineers and chemists.

Mr. Lesley, who presided over the meeting, re-

Mr. Lesley, who presided over the meeting, re-marked that the deductions to be drawn from Mr. Spackman's remarks reminded him of his early business experience, when there were no standard specifications for cement and when the using of natural cement and plastic mortars of all kinds was much more of a feature than it is at the present

day,
Albert Moyer, of the Vulcanite Portland Cement
Company, read a paper entitled "The Effect of
Sodium Silicate Mixed With or Applied to Concrete." The purpose of the paper was to show that
a treatment of sodium silicate would harden a
concrete surface where it was inclined to sluff off or be very soft by reason of improper laying. Mr. Moyer termed his material "Mineral Glue," which later became one of the by-words of the convention. The example taken for discussion in the paper was the recent experience which Mr. Moyer had in treating the floors of an office building in New York, where he obtained most excellent results by the application of sodium silicate, as explained in the paper. This paper is given here in full.

THE EFFECT OF SODIUM SILICATE MIXED WITH OR APPLIED TO CONCRETE.

By Albert Moyer, Assoc. Am. Soc. C. E.*

The easy abrasion, or what is commonly called "dusting" of cement concrete floors in office buildings, has called my attention to the need of a material which could be readily and economically applied, resulting in the hardening of the concrete itself and not

producing a vencer which would soon wear off under foot or other traffic.

Nearly all of the so-called floor finishes which are designed to protect the floor from dusting prove to be merely oil paints, some of them simply Portland cement ground up in varnish or linseed oil with some coloring matter and possibly other harmless materials which would enable the inventor to obtain a patent

There did not seem to be any material on the market which would sink into the pores and their market which would sink into the pores and their most a vener. This, with the possible exception of a chemical formula often used in France and Germany to proteet plaster and prepare same for mural decoration. This material is hydrofluosilicide of magnetic properties of the control of concret foors or the hardening of concrete surfaces for any purpose whatever, is entirely from the standpoint of economy, it costing from to 10 cents per square foot to correct the bad work of concret floors.

I, therefore, started some experiments with sodium silicate both in powdered form and in the form of water glass. I found that the powdered sodium-lained impurities which did not render it readily soluble in water. The sodium silicate in the form of water glass of about 40 degrees Baume', was readily mixed with water, the object being to thin the sodium-lained impurities which did not render it readily soluble in water. The sodium silicate in the form of water glass of about 40 degrees Baume', was readily mixed with water, the object being to thin the sodium-silicate did the sodium silicate flushed with the surface. That which flushed with the surface, being soluble, was also the surface which flushed with the surface. That which flushed with the surface, being soluble, was per pleased to term "mineral glue." From experiments extending over several months I found that we had to be provided to term "mineral glue." From experiments extending over several months I found that we had to be provided to term "mineral glue." From experiments extending over several months I found that we had to be provided to term "mineral glue." From experiments with the lime and other alkalies, hardening and waterproofing the surface, cast stone, waterproofing and protecting interior surfaces of concrete inverse of the concrete inverse of the surface of concrete such as the protecti

You will note a considerable falling off in strength.

Mixed with the usual amount of water containing no

sodium silicate and after 24 hours immersed in water containing 10 per cent. of sodium silicate:

7 days—360 lbs.
28 days—497 lbs.
Quite a considerable increase in strength.
We assume that the sodium silicate coming in contact with the lime or other alkalies and alkaline earth saits gives a reaction which causes a deposit of silicic acid which forms into an insoluble gelatinous silica and hardens into and acts as a mineral glue.

Sodium silicate mixed with the cement while the mortar is being gauged quickens the setting time, an arbitrary period determined by the stiffness of the mortar to a degree which will bear a wire or needle under certain pressure. The final hardening, howsetting concrete.

I mixed up some water glass in proportion of 1 part

setting concretes.

I mixed up some water glass in proportion of 1 part water-glass, 3 parts lime water—that is water containing all the lime which it would take up in solution, then decantered off. On standing for a few minutes it became a jelly. I then mixed up a solution of sodium silicate and ordinary water, mixed with it neat cement to a wet consistency, probably 30 per cent. water. Within a few minutes this mass had become a stiff jelly; this jelly is very quickly formed, thus quickening the time of setting, which in reality is merely a period of definite stiffness, and has little or no relation to the time of maximum hardening. This jelly having been formed before the cement had time to harden interfered with the process and weakness resulted, which is shown by the tests.

I would suggest that those interested in this sub-

to harden interfered with the process and weakness resulted, which is shown by the tests.

I would suggest that those interested in this subject experiment by using a retarder, such as a 10 per cent. solution of sodium hydrate caustic or a similar solution of magnesium sulphate. If the formation of the gelatinous silica is retarded until the cement has had an opportunity to set, it is possible that the strength of laboratory specimens will be increased. We might thus obtain some information as to the effect of sodium silicate on concrete if experiments are made extending over long time periods. A set of specimens in the form of briquettes and cubes for tensile and crushing strength may be made and stored in water, breaking these specimens in regular periods of time up to two years. As far as I know, this has not been done, and might possibly lead to some interesting data on this subject.

Concrete is strengthened and hardened when sodium silicate in solution is applied to the surface. The concrete has hardened normally and that which is porous will allow the introduction of sodium silicate to some little depth in the pores, the depth depending upon the porosity of the concrete. The action of forming into a jelly thus takes place without interfering with the process of hardening and this gelatinous substance forms into an insoluble mineral glue.

Without experimental proof and based upon the

of forming into a jeily thus takes place without interfering with the process of hardening and this gelatinous substance forms into an insoluble mineral giue.

Without experimental proof and based upon the theory of maximum density, it is my opinion that this method or treatment by the application of sodium silicate to concrete surfaces will act as waterproofing and prevent the action of salt, alkaline or sulphurous water on the surface.

This is a field which requires quite some laboratory experiments which should be followed up by field experiments. Sodium silicate in the form of watergiass is very cheap, less than 1 cent per pound, and a pound thinned down with water to the proper consistency that will enter the pores of the concrete will dover quite an area. I treated the floors of the office in which I am located, covering some 1400 square feet at a cost of 3,003 (three mills) per square foot, which includes all labor and material.

Should exhaustive experiments and field tests demonstrate by long time results that there is no further action of water on surfaces so treated, and that the sodium silicate remains in the form of an insoluble mineral glue, many very serious problems have been solved, such as the action of slakaint or sulphurous soil on drain tile and other concrete products, the protection of tanks against certain acids and oils, and the dusting of concrete floors.

I have taken the precaution to apply for a patent, as I find that no patent has been issued covering the use of sodium silicate for these purposes. The reason for making application for patent is to prevent others from obtaining same and thus protect the engineer and user of Portland cement by allowing the use of sodium silicate for these purposes. The reason for making application for patent is to prevent others from obtaining same and thus protect the engineer and user of Portland cement by allowing the use of sodium silicate for these purposes. The reason for making application for patent is to prevent others from obtaining same

*Mr. Moyer is the manager of the Sales Depart-tent of the Vulcanite Portland Cement Co., 200 Fifth

Dr. E. W. Lazell read an interesting paper entitled "Comparative Tests of Lime Mortar, Both in Tension and Compression; Hydrate Lime and Sand; Lump Lime and Sand and Cement, Lime and Sand." Dr. Lazell has spent many years in the Sand." Dr. Lazell has spent many years in the study of this particular class of materials, and he compared and discussed mortar-making values of compared and discussed mortar-making values of the various active materials, showing how each acted in a mortar compound and how they acted together. The result of his studies is very com-prehensive and as they have been carefully made and compiled, the paper goes to the files of the society as one of the prominent situations in its march of progress. We hope to have this paper for publication at some future time.

publication at some future time.

W. A. Aiken, of the Spackman laboratories, Philadelphia, read a paper entitled "Sand Specification and Its Specific Application." Mr. Aiken's paper was listened to with great respect as he is considered one of the leading lights in this particular feature of the concrete industry of America.

The engineering papers of M. O. Withey and A. T. Goldbeck covering exhaustive studies of columns and heave closed a very interesting session in

and beams closed a very interesting session in which the leading talent of the country partici-pated, showing the most interesting work that the society is doing.

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JULY 22

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Sessions were held devoted to Specifications on Preservative Coatings and Oils for testing machines and apparatus and on road materials.

The closing session was devoted to the various reports of the committee on "Standard Specifications of Paving and Building Brick," by L. W. Page, of the United States Geological Survey, as chairman. On "Standard Tests for Road Materials," also by Mr. Page, as chairman. On "Standard Specifications of Vitrified Clay and Cement Sewer Pipe," by Rudulph Hering. On "Standard Specifications for Grading of Structural Timber," by H. Von Schrenk. Besides the reports of various other committees, which closed the business of the session. session.

The increasing work of the society is the best evidence of its usefulness, the education and encouragement of the engineer who finds that his studies are parallel with those of other members, which confirms the knowledge already acquired and leads on to greater advancement. Probably no society has a recent results of the society and results of the society has a recent results of the society and results of the society has a recent results of the society and results of the society of the society and results of the society of th leads on to greater advancement. Probably no society has a greater or more wholesome influence upon the specifications for the protection of building materials than this great society, which has the unqualified endorsement of every line represented in the building and construction trades.

LOUISVILLE CONSTRUCTION.

Louisville, Ky., July 15.—One of the biggest pieces of concrete engineering contracted for in recent years is the work on the new \$4,000,000 bridge of the Kentucky & Indiana Bridge Company between Louisville and New Albany. The bridge's seven piers will be of concrete masonry, and contracts for these were let to Foster, Creighton & Gould, of Nashville, while the Indiana approach, which is to be built of concrete, will be constructed by Butler & Dolfinger, of Louisville. Work has already begun, the first part of it consisting of the construction of concrete piles. The new Gould patent steel piling will be used on this work, Donigan & Barret having placed the order for it. It is a new departure in the way of steel sheet piling. Foster, Creighton & Gould are well known in concrete engineering, having recently completed a large concrete bridge at Nashville and a concrete viaduct at Knoxville, Tenn. J. B. Speed & Co. secured the job, amounting to 40,000 barrels. This is one of the biggest orders placed in several seasons. Louisville, Ky., July 15 .- One of the biggest pieces

biggest orders placed in several seasons.

J. B. Speed & Co. are planning the construction at Speed's, Ind., of four concrete tanks for the storage of cement. This is a new idea in storage house con-struction and has been successfully tried by the company. The present storage capacity there is 125,000 barrels, and with the additional structures room for 60,000 barrels more will be added. The tanks will be cylindrical, about 40 feet in diameter and 50 feet high. They will be constructed entirely of reinforced oncrete, having openings at the top for the admission of the cement, which will be handled in bulk, and vents at the bottom where it may be taken out. The form of building has been found to be most convenient, and is of course entirely fireproof.

The National Concrete Construction Company has turned over to the Richland Parish Lumber Company.

turned over to the Richland Parish Lumber Company its reinforced concrete sawmill at Rayville, La., which is pronounced to be a new departure in the construction of buildings of this kind. It has secured contracts for the construction of several other important jobs. It is erecting the Klein building, a bakery and confectionery, on Fourth avenue, Louisville. Rein-forced concrete is used because it is not only fireproof but admits of sanitation being practiced thoroughly. The cost of this structure will be \$30,000. The company is also erecting foundations for turbine engines for the local plant of the Standard Sanitary Manufacturing Co., and is erecting an addition for the St. Mary's and St. Elizabeth's hospitals. It has resumed work also on the plant of the Fetter Lighting Company, which is of very heavy reinforced concrete

A permit has been issued for the construction of e Tyler Hotel by the Lori Toler von Struction of A permit has been issued for the construction or the Tyler Hotel by the Levi-Tyler Land Company. It will cost \$150,000. McDonald & Dodd are the architects. A considerable portion of this building will be of reinforced concrete. It will be eight stories high. Work on the building of the Snead Power Plant Company, on Market street, is progressing rapidly, as is that on the Business Women's Club. Both of these structures are being built of reinforced concrete.

David R. Lyman has been appointed city engineer, succeeding J. B. Claybrook. Mr. Lyman has been assistant engineer for several years. He is in charge of street construction.

The government is securing ground north of the resent canal and will widen it to twice its present ze. A new retaining wall of concrete will then be nilt. The total cost of the improvement will be present \$1,500,000.

CONCRETE BLOCK SILOS

W. H. Humphrey, of Butler County, Pa., gives the following instructions for building concrete block silos:

"We built two concrete block silos last summer, and they have proven very satisfactory so far. The silage could not have kept better than it did in these silos last winter. We made the blocks here on the farm; they were hollow and circular, 18 inches long outside measurement and 16 inches inside. They were 10 inches high and 8 inches thick. Our silo was 12 feet in diameter. We reinforced

Our silo was 12 feet in diameter. We reinforced the walls with half-inch rods every third course of blocks. We did not use perpendicular reinforcement, and we do not believe they are necessary. We have had no trouble with the rods contracting or expanding in hot or cold weather, or with pressure. Our silos are just as good as when built, with no cracks or defects that we can find. Where sand and gravel is handy the cost is less than with wooden silos, and they are better and certainly more lasting than the wooden silos. We purchased the block machine and the reinforcing and door frames, etc. All have proved very satisfactory." frames, etc. All have proved very satisfactory.'

USING KELLASTONE.

The new houses erected for William McNeill by the Smith Construction Company at Hammond, Ind., are nearly completed, and the workmen are now plastering the walls with a new preparation which no doubt will become very popular in the near

The plaster is the new patent Kellastone cement The plaster is the new patent Kellastone cement composition, which, being placed on the walls, sets immediately. It not only can be used for walls, but for floors, roofs, shingles, and, in fact, anything in the line of building. It is fireproof, and the cost is about the same as an ordinary plaster. It is manufactured by the U. S. Kellastone Company, of Terre Haute Ind. Terre Haute, Ind.

HANDSOME CATALOGUE.

Columbus, Ohio, July 19.—The Phillips Cement Stone Company, whose plant is located at 100 North Skidmore Street, has issued a very handsome booklet, showing the growth of its business. It contains half-tone reproductions made from original photographs, showing many handsome residences and ornamental work furnished by this company. William H. Phillips has been in the concrete business in Columbus for quite a number of years. He has built the business up from a very small beginning, having gone into the manufacturing of concrete blocks when they were considered a novelty. His plant is thoroughly equipped with the most modern machinery and appliances, and his product

modern machinery and appliances, and his product is without question the best that can be made.

Mr. Phillips has also patented a continuous concrete mixer. These mixers were first manufactured for his own use, but he now manufactures them for the trade.

REINFORCED CONCRETE WAREHOUSE.

Brooklyn, N. Y., July 19.—A reinforced concrete warehouse to cost \$120,000 is to be built by the New York Dock Company, on the west side of Inman Street, north of Pierpont Street. It will be four stories high, with a frontage of 100 feet and a depth of 210 feet. A fire pump capable of raising 1,000 gallons of water per minute will be constructed in the cellar, and will be connected with a 50,000-gallon gravity supply tank twenty fact above the roof.

CONCRETE TOMB.

Ellsworth, Me., July 20.—The East Lamoine Cemetery Association has awarded the Pine Hill Conetery Association has awarded the Pine Hill Concrete Company, of Ellsworth, the contract for a tomb, to be erected in the cemetery. The tomb will be built of concrete blocks, and will have a front of 17½ feet. The inside dimensions will be 7 feet 8 inches by 11 feet 6 inches.

CONCRETE APARTMENTS.

New York, N. Y., July 20.—The Rockaway Building Company, a corporation organized this spring, of which William Schulze is the president, has started the erection of twenty-three reinforced concrete houses, at the foot of Grove and Hamils Avenues. The architect is Joseph P. Powers, of Rockaway Rock N. Y. away Beach, N. Y.

The Acme Tiling and Concrete Company has been The Acme Thing and Concrete Company has been organized at Paragould, Ark., with \$25,000 capital stock, to manufacture tiling and concrete blocks.

A. Bertig is president; H. S. Trice, treasurer; D. D. Hodges is secretary, and D. G. Woody is vice-presidents. dent and manager.

THE USE OF CONCRETE IN THE CON-STRUCTION OF PAVEMENTS.*

By James Pierson, Toronto, Ont.

By James Pierson, Toronto, Ont.

The Scientific American gives the definition of a pavement as "a covering composed of some durable substance laid on a street or road to keep the surface uniform and maintain it in a condition capable of sustaining traffic. There is no branch of applied science that has in recent years made more progress or arrived at a state nearer to perfection than that of civic road making or the construction of pavements.

Today we have the outcome of this progress evidenced in the up-to-date asphalt and other smooth surfaced pavements laid on an unyielding, rigid and durable foundation—pavements easily repaired and capable of being kept absolutely clean and healthful by flushing or washing and furnishing to the citizens the greatest possible facilities, convenience of and comfort in travel, both for vehicles and people on foot, and at the same time adding greatly to the beauty and general appearance of our streets.

No matter how fine the architecture of a city may be, without neatly constructed, clean pavements, the effect is lost. Such pavements will hide a multitude of architectural defects. Have you ever observed the wonderful change that the substitution of an asphalt or other up-to-date pavement for an old and neglected Macadam roadway has on the general appearance of a street? The residents immediately take an interest in their premises and set to work to add to the general appearance by planting trees, sodding the boulevard, etc., so that in a very short time one would scarcely recognize that it was the same street.

So much has the importance of up-to-date pavements in towns and cities become recognized as essential to the improving of the general appearance of the place and adding in and evidencing its enterprise and prosperity, that they all seem to be engaged in an effort to outdo each other in the matter of pavements, and thus our towns and cities during the past few years are taking on a vastly improved condition and much to their own convenience and comfort. They have found

spent in this way, in addition to the other advantages, has added much more than the cost to the value of their properties.

Nor is this ambition for high class pavements confined to the larger centers. It has spread to the smaller towns, even those of five and six thousand inhabitants, with faith in the prosperity and future of the country and seeing the great assistance to the progress of a place good pavements are, become possessed of the idea of having at least their main streets properly paved.

As an evidence of the progress that is being made in this respect, I may mention that in Toronto alone in 1908 (the figures of 1909 not yet being compiled) there were laid 25 miles of pavements on a concrete base or foundation consisting of 21 miles of asphalt and 4 miles of other kinds, such as brick and asphalt block, and all with a concrete curb and gutter except the brick, which has a curb but no gutter. In the same year there were laid 55 miles of concrete sidewalks, making a total of 340 miles of such walks in that city up to the end of 1908, and 1909 had about as much concrete paving work done as 1908. Toronto has now about 120 miles of saphalt pavements, all laid on concrete varying work done as 1908. Toronto has now about 120 miles of saphalt pavements, all laid on concrete varying from four to six inches in depth.

Other towns and cities are making corresponding progress, and using enormous quantities of cement in the work.

So much as to what has been, and is being accomplished in the way of improvement in the quality of

asphalt pavements, all laid on concrete varying from four to six inches in depth.

Other towns and cities are making corresponding progress, and using enormous quantities of cement in the work.

So much as to what has been, and is being accomplished in the way of improvement in the quality of pavements and the increasing area that is being laid.

It will be my object in this brief paper to endeavor to show how these greatly changed conditions were effected and the important part played by Portland cement or concrete, in the bringing about of them.

Going back, we find the first important step towards improvement in road making was the invention of John L. Macadam, who, in or about the year 1818, devised the road made of broken stone which is still known by his name, and so far as country roads are concerned, it is still the recognized standard all over the civilized world, and when well laid is a good one for country use, but when heavily traveled requires constant repair—and since the advent of the motor car will be still more difficult to keep in good condition.

Although no change has been made up to the present time in the construction of the Macadam road, this device did have something to do in the development or evolving of the ideal smooth surfaced pavement, with concrete foundation, of the present day, and this is how it occurred: In the district of Val de Travers, Canton of Neuchatel, Switzerland, Macadam roads were made of a broken brown bitunious limestone. Under the pulverizing effect of the traffic and the influence of the sun in softening the bitumen the surface of the pavement of the sun in softening the bitumen the surface of the pavement of the sun in softening the bitumen the surface of the pavement of on own Canadalan seaport towns and Ottawa, but the cost in comparison with the use of Trinidad and other American asphalts which have since come into competition makes its further use in American prohibitive.

The success of this bituminous rock as a pavement led a French chemist named Edward De

wooden block pavement laid in Toronto over thirty years ago on King Street from Yonge to York. But our experience of wooden block pavements was mostly with the round cedar block cut from the log and laid on tarred boards or on a bed of sand and gravel, mostly the latter, and a wretched experience it was. There was also the cobblestone pavement—roughest of all, and where the cost could be borne, as it was expensive, stone block of granite or sandstone were resorted to. Such were the devices and makeshifts adopted before, and leading up to the modern and present day permanent pavement. But the subject in hand, vis., the use of concrete in the construction of pavements:

In experimenting it was found that the use of asphalt, whether Val de Travers, Trinidad or any other, it was only serviceable as a surfacing material and to make a pavement with it a firm and rigid base or foundation was absolutely necessary. As a surfacing material, smooth, easily kept clean and repaired, sand and pulverized limestone mixed with sufficient asphalt to cement them to gether, made the nearest approach to the ideal pavement surface that had yet been hit upon, but it was absolutely useless without a rigid base to support it, so a cement concrete was tried and found to meet the requirements and thus the use of concrete originated as an asphalt pavement base.

Noting the utility and success that attended concrete

surface that had yet been hit upon, but it was absolutely useless without a rigid base to support it, so a cement concrete was tried and found to meet the requirements and thus the use of concrete originated as an asphalt pavement base.

Noting the utility and success that attended concrete as a base or foundation for asphalt pavements, it has been adopted generally by civic engineers as a base for meet other pavements such as brick, vitrified block, asphalt block and even granite block is now laid on concrete, as experience proves that it gives and maintains a more even surface to any class of pavement.

As a base it has many advantages over any other foundation. On streets where the subsoil has been cut and disturbed by putting down sewers, water and gas pipes and making connections with buildings and where a settling is likely to take place, a good five or six-luch concrete will maintain any ordinary traffic, even if unsupported at these cuts. Its use has also entirely supplianted the use of stone in curbs and gutters and with great economy as to cost. A stone curb and gutter that would cost about \$1.00 per lineal foot can be laid for half that cost with cement, while the latter far excels the former in durability and appearance. Stone curbs made of straight blocks do not compare in appearance with the graceful curve of a concrete construction on a winding street, nor will stone curbs remain in position, momatter how well set, owing to the depth of the frost in our cold winters. The recognized construction of concrete curb and gutters now is to have them constructed on the concrete base and at the same time. This saves material and forms one solid body consisting of base, curb and gutter. Sometimes when the sidewalk is constructed before the pavement and is placed out adjoining where the pavement is to be, the curb is built as a part of the walk and is then made of sufficient depth to form a curb to the bottom of the base of the intended pavement.

As a base for pavements concrete has another advantage in th

to form a curb to the bottom of the base of the intended pavement.

As a base for pavements concrete has another advantage in that it can be laid on ground that is wet and even soft, as moisture only improves its quality, and being a solid body it will bear up the traffic even if there are weak spots underneath. Its use is now revolutionizing the construction of those parts of street pavements occupied by street car lines or tracks. Heretofore the rails have been almost entirely laid on wooden ties resting on the ground. With the modern large street car and heavy traffic, tracks so laid are continually sinking so that the rails have at great expense and inconvenience to traffic, to be frequently shimmed up to keep the motors underneath clear of the pavement. But by the use of concrete under the ties or under the rails without ties a rigid and permanent track can be had and the pavement between the rails kept even with that on the outside, thus giving the whole street an even and durable surface except as to the groove for the flange of the car wheels to run in.

These are some of the advantages recognized in the use of concrete as a base for the modern pavements, but the vegets of all is its actual.

side, thus giving the whole street an even and durable surface except as to the groove for the flange of the car wheels to run in.

These are some of the advantages recognized in the use of concrete as a base for the modern pavements, but the greatest of all is its durability. It is permanent, so that when the wearing surface wears out, which in time all wearing surfaces will, it is still there as good as ever ready for a new top—and thus it is in the end the most economical. In fact, so generally recognized has concrete become as the proper base for all the best pavements that the proper definition for a permanent pavement as distinguished from others may be said to be a pavement having a concrete base. And right here I would tender some advice to the small towns that are raising funds for permanent pavements on their main streets, that no matter what surface they adopt, whether asphalt, asphalt block, brick or bituminous macadam, they should insist on a concrete base. In this they will then always have a valuable asset—a base that can be resurfaced from time to time after the first one wears out. It will prove to be the most economical in time. With regard to the use of concrete as a wearing surface, while it is recognized as the most excellent material when properly made, for sidewalks, presenting a beautiful surface that wears evenly and is more durable than stone, except perhaps granite, yet it does not form a good wearing surface for a busy street with much vehicular traffic with iron tires. It has no resiliency and is too brittle and when it wears uneven by reason of the constant beating of the Iron tires and horses' shoes, it is difficult to repair. In fact, the quality, rigidity, which makes it a perfect base, militates against its use as a wearing surface. This conclusion is not mere theory, for it has been tried as a wearing surface. About fifteen years ago a street half a mile in length in Utica was paved with it under the "hyfaluton" name of Sliica Byritic, but even the name did not save it from we

The Granite Concrete Stone Company, Milwaukee, Wis., has been incorporated by Prosper L. Gotschalk, Joseph L. Gotschalk and Pauline Gotschalk. Capital stock, \$5,000.



The following announcement is not only selfexplanatory, but undoubtedly of interest to the trade in general:

Chicago, Ill., June 30, 1910.

Chicago, Ill., June 30, 1910.

Gentlemen:

We beg to announce that the Edgar Allen American Manganese Steel Company, recently organized in Chicago, has purchased the Chicago Heights works of the American Brake Shoe & Foundry Co. and the New Castle, Del., plant of the Tropenas Steel Co., and that after this date the manganese steel business of both the sbove mentioned companies, also the manganese steel business heretofore conducted in the United States of America by Edgar Allen & Co., Ltd., Imperial Steel Works, Sheffield, England, will be carried on by the newly formed company.

Both the Chicago Heights and the New Castle works are now undergoing additions and improvements which will double their espacity.

Associated with us in our manufacturing department are steel experts of the highest standing, who have had many years of experience in the successful manufacture of manganese steel castings for all classes of service, and we feel that with modern, well equipped plants, whose product is already favorably known, the purchaser is assured of prompt delivery and excellent castings.

The executive and general sales offices will be at

purchaser is assured or prompt derivery and excellent castings.

The executive and general sales offices will be at 193 Michigan avenue, Chicago.

In addition to the above mentioned offices the vari-ous sales agencies which had been established by the manganese steel department of the American Brake Shoe & Foundry Co. will now represent this company. The locations of these agencies are as follows:

Mr. V. W. Mason, Jr., eastern sales agent, 30 Church street, New York, N. Y.

Mr. P. M. Vilas, 425 New York Life Bidg., Minneap-olis. Minn.

olis, Minn.
The A. T. Herr Supply Co., 414 Ideal Bldg., Denver,

Colo.
Mr. F. E. Johnson, 605 Newhouse Bidg., Salt Lake City, Utah.
Mr. J. W. Plant, 644 Monadnock Bidg., San Francisco,

City, Utan.
Mr. J. W. Piant, 644 Monnua.
Mr. J. W. Piant, 644 Monnua.

Cal.
Assuring you of our desire to serve you satisfactorily in every way and hoping that we may always be favored with your inquiries, we are
Yours very truly,
EDGAR ALLEN AMERICAN MANGANESE STEEL CO.,
W. S. McKee,
General Sales Manager.

All those interested in conveyors or the economic handling of crushed stone should write to the Stephens-Adamson Mfg. Company, Aurora, Ill., for phens-Adamson Mfg. Company, Aurora, Ill., for their little pamphlet, "Modern Progress in Labor-Saving and Coal-Handling Machinery." Uncle Sam uses their "S-A" pivotal bucket carrier and their "Jumbo" steel conveyors in the immense work now being carried on by the government on the Panama

This little booklet is replete with information, is attractively constructed and gives new ideas in regard to what may be accomplished with the proper machinery.

George C. Christopherson & Son Iron Works, manufacturers of Eclipse concrete block machines and mixers, of Wichita, Kans., say:

"The demand for concrete machinery along its

is surely growing very fast. There the last thirty days, been quite a number of new plants equipped with our Eclipse concrete stone ma-chines and mixers, and we have reports from a number of old established plants using from one to three of our Eclipse machines that they are quite busy and many of them way behind with their orders. These reports come to us largely from Iowa, Nebras-ka, Kaneas and Oklahoma, although we have some scattered reports throughout all parts of the United States. We have lately installed our Eclipse machines in the following plants;
D. R. Warburton, Grinnell, Ia., Eclipse stone machine; additional equipment.
Dunham & Jarvis, Ashland, Kan., Eclipse mixer; new

Hall & Wemple, Palmyra, Neb., Eclipse mixer; addi-Hall & Wemple, Palmyra, Neb., Eclipse mixer; additional equipment.
Carlson Tile & Mantle Co., Wichita, Kan., Eclipse stone machine and mixer; new plant.
C. N. Powers. Silver Creek, Neb., stone machine; additional equipment.
Ben Elledge, Oscoola, Neb., Eclipse stone machine; additional equipment.
Stricklin & Stricklin, Cordell, Okla., Eclipse stone machine; new plant.
Jordan & Troutman, Guthrie, Okla., Eclipse stone machine; new plant.
J. W. Figlider, Pauls Valley, Okla., Eclipse stone machine; new plant.
F. E. Shore, Wakita, Okla., Eclipse stone machine; new plant.

plant.

England Cement Stone Co., England, Ark., Eclipse stone machine; additional equipment.

A. Bennett, Greenville, Ill., Eclipse stone machine; additional equipment.

Southern Contracting & Coucrete Co., Jacksonville, Fia., two Eclipse stone machines; additional equipment.

A. J. Jones, Bennett, Neb., Eclipse stone machine; new plant.

Lon Wilson, Fairfield, Neb., Eclipse stone machine; additional equipment.
Brown Brothers, Greensburg, Kan., Eclipse mixer; additional equipment.
Edwards & Nichols Supply Co., Spearville, Kan., Eclipse mixer; additional equipment.
Alex. Nerison, Norway, Ia., Eclipse mixer; additional equipment.

equipment.
Don Wilhite, Garfield, Kan., stone machine and mixer;

Don Willite, Gainete, Rand, Development plant.
Chris. Feller, Wakeeney, Kan., Eclipse stone machine and mixer; new plant.
De Witt Stone Co., Salina, Kan., Eclipse stone machine and mixer; new plant.
J. S. Utterback, Sigourney, Ia., Eclipse mixer; additional equipment.

tional equipment.
N. R. Hamilton, Ashland, Kan., Eclipse mixer; new Randall & Perry, Belleville, Kan., Eclipse mixer; addi-

tional equipment.

Enid Imp. Mfg. Co., Enid, Okla., two Eclipse stone machines and mixer; new plant.

E. Madison, Ford, Kan., Eclipse mixer; new plant.

J. A. Owen, Belleplaine, Kan., Eclipse mixer; additional equipment.

H. J. Murphy, Marengo, Ia., Eclipse mixer; additional equipment.

uipment. Dyer & Harkness, Belleville, Kan., Eclipse mixer; ad-

Dyer & Harkness, Bellevine, Man., Eclipse ditional equipment.
Schwartz Lumber Co., Wichita, Kan., Eclipse mixer; additional equipment.
Best Block & Brick Co., Cedar Rapids, Ia., Eclipse stone machine; additional equipment.
Hilty & Kauffman, Hesston, Kan., Eclipse stone machine and mixer; new plant.
W. L. Holbrook, Jetmore, Kan., Eclipse mixer; additional equipment.

equipment. Charles, Kinsley, Kan., Eclipse stone machine;

A. J. Charles, Kinsley, Rain, Scholler, Charles, Robert D. J. Fair Lumber Co., Nickerson, Kan., Eclipse stone machine and mixer; new plant.
Standard Salt Co., Little River, Kan., Eclipse mixer; additional equipment.
Sedgwick County Home, Wichita, Kan., Eclipse stone machine; new plant.

Alf. Q. Wooster, Erie, Kan., Eclipse stone machine; new plant.

The many inquiries we have received and orders a strong growing demand for all kinds of concrete products."

The Lehigh Car Wheel & Axle Works, Catasauqua, Pa., has issued a new catalog describing its "Fuller" face-hardened sprocket wheels, also their traction wheels, chilled conveyor bearings and gudgeons. Special attention is called to their face-hardened sprocket wheels. The many merits and excellencies of these wheels and why they excel others described in detail.

Price lists are given and undoubtedly this catalog will be of benefit to those interested in the

economical operation of elevating and conveying machinery and for transmission of power.

The Lehigh Car Wheel & Axle Works also manufactures the "Fuller-Lehigh" pulverizer mill, gyratory crushers, cone heads and concaves for gyratory tory crushers, cone heads and concaves for gyratory crushers, grinding and crushing rolls, chilled roll shells, pug mill knives, "Fuller" mixture gears and shells, pag mill knives, "Puller" mixture gears and pinions, jaw plates for crushers, mine wheels, electric car wheels, railroad wheels, roll heads and dies for Griffin and Kent mills, nuts and pans for Mosser crusher and cracker, ball mill grinding and lining plates, tube mill lining plates, belt idlers and takeups, Muller rings and tracks and screen plates for dry pans, hammers for hammer mills, and all kinds of high-quality charcoal chilled castings.

The Austin Manufacturing Company, Chicago, have cently issued a catalog consisting of 112 pages. cently

They say:

They say:

"This publication primarily covers our entire line
of earth handling machinery, with which the name of
Austin has been associated for almost sixty years.

"The New Era Grader, which is the leading feature
of this catalog, has been one of the principal machines
used in the construction of all the great railroads and trunk lines to the West over the prairie. There is perhaps no machine in the history of road making is perhaps no machine in the history of road making that has been such an important single factor in forwarding the work, taking the place as it does of hundreds of men and dozens of teams.

"The catalog also describes our other earth handling line of machines, such as dump wagons, wheel and drag scrapers, railroad plows, etc.

"This catalog is not confined to our earth handling line only. It describes our other line of machinery for rock crushing and road building.

line only. It describes our other line of machinery for rock crushing and road building.

"Our factory is the only one in the United States which produces within its own walls an entire line of machinery for building roads from the virgin soil upwards. We make everything from a drag scraper to the most powerful and heavy road rollers. We produce rock crushers with a capacity of 50 to 2,000 tons per day."

Dun & Lallande Brothers, concrete contractors, of Birmingham, Ala., have during the past month done a large amount of sidewalk, gutter and ornamental work at Corey. One of their most important jobs at the present time is the sidewalk and sewer construction at Ardest Heights at a cost of

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good. perfection." In co Machin

In Sands develo other ern Ra Railwa Have you received a copy of the latest catalogue of the Chicago Concrete Machinery Company, Milwaukee, Wis. It will interest you. It is gotten up in their usual neat and attractive manner, hand-somely illustrated. Therein is described fully the somely illustrated. Therein is described fully the "Chicago" concrete mixer, its feed, its wearing qualities, its protection and alignment of parts. The matter is carefully compiled and the merits of the "Chicago" are forcibly and convincingly ex-

Water tanks and hoists, batch hoppers and their street railway paving mixer are clearly described. The information table is of much value to all in-

terested in concrete mixers.

Their concrete elevators and the extra power table required for elevators and the extra power table required for elevator work are commented upon and explained concisely. The diagrams are good and add to the general excellence of the pamphlet. Write for one. It will be mailed to you upon request.

Reports from reliable sources seem to indicate a very promising activity in the building trades throughout the country during the summer months. We hear from the Ricketson Mineral Paint Works, of Milwaukee, that orders for their famous "Red Brick" brand mortar colors continue to come in at an unusually good rate. The products of this conan unusually good rate. The products of this con-cern have become almost the set standard for high-est quality, and their goods have a country-wide distribution. Any report coming from them is pretty well indicative, therefore, of the general condition of the building trades as a whole. The company has prepared a neat folder showing their complete range of tints in the natural colors, which should be in the hands of everyone interested in the building trades. A postal will get it for you.

The latest pamphlet of the Cement Tile Machinery Company, Waterloo, Iowa, contains much valuable information. The treatise on "Care in-Mixing Concrete an Absolute Necessity" is worth repeating in full:

valuable information. The treatise on "Care in-Mixing Concrete an Absolute Necessity" is worth repeating in full:

Improper mixing of the aggregates that enter into the formation of concrete often results in poor work, thus inviting criticism from those who make it their business to "knock." Your reputation, your success, depends on the quality of your product and that depends on your nixing equipment.

Any kind of a machine mixer will make better concrete than is ordinarily made by hand. At least experience and many tests show conclusively that a machine does better work. For instance, the average modulus of elasticity of hand mixed specimens at a stress of 700 pounds per square inch was 2,500,000, while that of machine mixed was 2,870,000, an increase of 12½ per cent. The concrete which was mixed by machine also developed a crushing strength 25½ per cent greater than the other.

From the standpoint of economy, also, the machine can give the highest cards in the deck to the cheapest labor that ever handled a shovel. The difference in price varies somewhat, of course, but the machine usually beats the hand method by about forty-five cents per yard. That means that you can pay for your mixer out of the first thousand yards it mixes. After which you have forty-five cents of "pure cream" to show for every yard of concrete turned out.

However, there are mixers and mixers. While any kind may be good, some are better. If you more intimately mix your ingredients and get higher test figures, so much the better. If you can bring your amount of "cream" up to fifty cents per yard, why be content with forty-five cents?

The principle of the continuous mixer is coming to be recognized more and more every day as the correct one. It is the mechanical principle which is being introduced into all lines of machinery as being vastly more economical than a reciprocating motion which the batch mixer represents.

The trouble has been used, the operation has partaken largely of the nature of guesswork at the best; and if the man who

In connection with this article the Cement Tile Machinery Company state that they guarantee that

you can rely upon their "Perfection" mixer every minute of the day, and for every yard of its output. The pamphlet is handsomely illustrated, gives full information in regard to their mixer, as well as the

power equipment for concrete working plants.

They state that they believe in the "money back if not satisfied" policy, and make the following

offer:

"We will ship the machine ordered and you will
be given an opportunity to test it out on your own
work and under your own supervision, with the
understanding that if it fails to live up to your
expectations you are to have the privilege of returning it without a single question being asked."

"Write and secure one of these pamphlets."

The American Brake Shoe & Foundry Company, 30 Church street, New York, has sent out the following announcement:

"We beg to announce the sale of our Chicago Heights works to the Edgar Allen American Manganese Steel Company of Chicago, which company has recently been organized for the purpose of succeeding to the manganese steel casting business formerly conducted by the manganese steel department of the American Brake Shoe & Foundry Company, Edgar Allen & Company, Limited, and the Tropenas Steel Company of New Castle, Del., "The controlling interest in the new company is retained by the American Brake Shoe & Foundry Company, whose manufacturing and sales departments as applied to its manganese steel business will continue without change.

"It will readily be understood that the Edgar Allen American Manganese Steel Company will enter upon its career equipped with a manufacturing department composed of the best talent in the world. Its two well equipped, up-to-date plants one located at Chicago Heights, Ill., and the other at New Castle, Del., are both being doubled in capacity at this time. It is hoped that the added facilities above mentioned will result in the maintenance of the high quality of the product, and the prompt filling of all orders.

"The location of our eastern plant will be of especial interest, inasmuch as it means prompt deliveries.

"The New York office will be continued as heretofore, and all inquiries for prices, orders, etc., should as heretofore be sent to this office.

"We take this opportunity of expressing our appreciation of past favors, and sincerely hope that our relations may continue pleasant under the new name."

The Howells Mining Drill Company, of Plymouth, Pa., manufacturers of mining drills of every description, are getting ready to place on the market their new Spry, type "D," electric machine.

Louisville, Ky., has appointed James C. Campbell & Co., First National Bank Building, Chicago, Ill., its western sales agent. The Campbell company will handle the wooden side dump cars made by the Louisville firm The Continental Car & Equipment Company,

The Bucyrus Company, of South Milwaukee, Wis., has recently secured the manufacturing and selling rights for the Heyworth-Newman drag line excavators and taken over the business formerly conducted by James O. Heyworth.

To the user of rubber belting the separating or opening up of the plies and splitting of the seams has always been a source of expensive annoyance, the has aways been a source of expensive annoyance, the belting proving absolutely useless on these accounts long before it was actually worn out, and generally at a time when it was most needed, causing shutdowns that are often very costly.

To overcome these defects or weaknesses manu-

To overcome these defects or weaknesses manufacturers have experimented for a great many years in an endeavor to produce a rubber belt that could not separate in the plies or split down the seams, but were unsuccessful, W. H. Salisbury & Co., Inc., of Chicago, state, until "R. F. & C." solid woven rubber filled and covered rubber belting was placed on the market a number of years ago.

"R. F. & C." solid woven rubber belting is made under a patented process and built upon principles.

that not only perfectly overcome above defects but also eliminate to the fullest extent every difficulty commonly met with in the use of "old style" eemented ply rubber belt, in which the layers or plies are held together with so-called friction or rubber cement.

cement.

"R. F. & C." rubber belting gives perfect pulley

contact, owing to its extreme pliability, produces less dead weight on shafting and pulleys, developes maximum power with minimum stretch, and in other features has proven itself in service in the largest cement and rock plants, steel mills, packing houses, grain elevators and various other large manufacturing institutions throughout the United States and Canada, to excel for long, satisfactory and economical service any old style or cemented ply rubber belt produced today. produced today.

W. H. Salisbury & Co., Inc. (established 1855), of Chicago, Ill., will undoubtedly be pleased to give you samples, prices and further details at your request.

The Taylor Iron & Steel Company, High Bridge, N. J., is sending out to the trade a unique card concerning Tisco manganese steel. All information in regard to manganese steel should be appreciated. We give the card verbatim: "All steels contain manganese. There is no copyright on the term "manganese steel." Any steel may be called manganese steel. Tisco manganese steel (patented) is the original and is the standard. So many steels offered are imitations of it, depending on the high reputation of Tisco manganese steel for their sale, that you can only The Taylor Iron & Steel Company, High Bridge, Tisco manganese steel for their sale, that you can only be sure of procuring our guarantee castings by specifying "Tisco manganese steel."

From time to time the Taylor Iron & Steel Com-pany has issued bulletins to cover the application of their "Tisco manganese steel" to the parts of crushing plants that give trouble either through wear or breakage. Those of special interest bearwear or breakage. Those of special interest bearing on this particular class of work are Nos. 101 on Panama teeth, 102 on screens, 104 on jaw crushers, 105 gyratory crushers, 106 chutes and 108 mine and skip car wheels. These bulletins contain much information that is of particular value to crusher men and will be mailed promptly to any address upon request.

address upon request.

The pneumatic sand rammer, manufactured by the Ingersoil-Rand Company, 11 Broadway, New York, for foundry and concrete work, is one of those labor-saving devices which has made a permanent place for itself, even against strong opposition, on the ground of economy, lower production cost, larger output and improved quality of product which follow its use. Lower labor cost, greater rapidity of work and a product of uniform quality and distinct superiority can be added when used for ramming concrete into molds.

The increasing demand for concrete forms equal

The increasing demand for concrete forms equal to the most severe tests makes it incumbent upon the makers to produce a material which will stand the closest scrutiny, and the pneumatic sand rammer will be one of the chief factors in attaining

this result. In permanent concrete construction in massive form, such as bridge and pier construction, paving, retaining walls, abutments, foundations, etc., this machine produces an unusually solid, rock-like concrete of the highest quality, that would be most difficult to procure by any other means.

The Besser Manufacturing Company, manufacturers of concrete machinery at Alpena. Mich., say that business with them has been splendid, and that if the record made so far this year keeps up for the balance of the season it will be a record-

Chalmers & Williams, of Chicago, have sold Kennedy gyratory crushers to the following parties: Three No. 6 crushers to Elmore & Hamilton, one No. 6 to Tennessee Copper Company and one No. 4 for shipment to Brazil.

F. A. JONES, M. E. GYPSUM SPECIALIST.

Consulting Mechanical, and Chemical Engineer in Designing: Construction, and Operation of Plaster Mills, Mines, and Mixing Plants. Plans, Specifications, Estimates of Cost, Superintendence of Comstruction, Rotary or Kettle Process. Examination. Pests, Analyses, and Reports of Gypsum Properties, Mills Remodeled and Enlarged, Mixing Plants Erected, and Formulas Furnished.

YOUNGSTOWN, OHIO,

In the Southeast are advantageously located deposits of Cement Rock, Shales, Clays, Fine Kaolins, Sands, Marbles, Granites, Limestones and other Building Stones awaiting development. The Southeastern States are growing more rapidly than any other section, and unsurpassed opportunities are found in them. The Southeastern States are growing more rapidly than any other section, and unsurpassed opportunities are found in them. The Southeastern States are growing more rapidly than any other section, and unsurpassed opportunities are found in them. other section, and unsurpassed opportunities are found in them. The Southern Railway, Mobile & Ohio Railroad, Georgia Southern & Florida Railway and Virginia & Southwestern Railway give shipping facilities to all portions of the country.

M. V. Richards, Land and Industrial Agent 1370 Pennsylvania Ave., Washington, D. C.

FOR IMMEDIATE SHIPMENT NEW AND REBUILT CONTRACTORS' AND MUNICIPAL MACHINERY.

One Rebuilt "good as new" New Era Elevating Grader. Rebuilt Jaw Crushers, and Reversible Graders of all Standard Makes. One 25 H. P. Robinson Traction Engine Thoroughly Rebuilt; a bargain. One 12 H. P. Springfield Traction Engine Rebuilt Throughout.

ebuilt Infoughout.

HEADQUARTERS FOR Concrete Mixers, Wheelbarrows, Gasoline Engines, Gyratory and w Crushers, Cars, Hoist and everything in Quarry Equipment,

Write us for catalogue and prices. THE WILLIAMS CONTRACTORS' SUPPLY CO., Columbus, Ohio

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Advertisements will be inserted in this section at the following rates:

Heading counts as two lines.

No display except the headings can be admitted. Remittances should accompany the order. No extra larges for copies of paper containing the advertise-

EMPLOYEES WANTED

If you are in need of or wish to sell anything which comes under any of these classifications, write us. If you have something not coming under these classifications we will create one for you.

THOROUGHLY CAPABLE OPERATOR

wanted for full charge of quarry and rock crusher.

Address "X" care Rock Products

BUYERS AND AGENTS WANTED

to sell our concrete mixers and cement block fence post and brick machinery. Send for circulars and prices. Address, Keller Concrete Machine Co., Kearney, Nebr.

SUPERINTENDENT WANTED

For limestone quarry. Man capable of handling large plant, steam shovels, locomotives, etc.
Address "J. L. A.," care ROCK PRODUCTS.

SUPERINTENDENT WANTED

for lime plant, eastern Pennsylvania; 3 kilns and hydrator. Must be thoroughly competent. State fully experience, qualifications, salary, references, age.

"HYDRATE," care Rock Products.

KETTLE MAN

Wanted—First class kettle man for plaster mill in the est. Address NO. 767, care Rock Products.

EMPLOYMENT WANTED

OFFICE AND SALES MANAGER.

Wanted—Position as office and sales manager for wall placed properties of the proper

MACHINERY FOR SALE

A CHEAP CRUSHER.

For Sale—1 Altman Crusher No. 3, cheap. Address John C. Fuller Stone Co., Stilwater, N. Y.

No. 1B-specially built for fine crushing; one No. 4 large capacity. Will sell at sacrifice. Replaced by new style improved crusher.

Eureka Stone and Ore Crusher Co.

CEDAR RAPIDS, IOWA.

Attention, Quarrymen!

For sale—No. 8 Austin Gyratory Crusher, No. 5 Austin Gyratory Crusher. No. 3 Austin and 2 No. 6 Gates 70-ton Vulcan Steam Shovel, 2-yard. 50-ton Bucyrus Steam Shovel, 1%-yard.

50-ton Bucyrus Steam Shovel, 1%,-yard.
Loco. Crane, with 1½,-yard Clam Shell.
Little Glant Traction Steam Shovel, 1-yard.
Hayward Orange Peel Buckets, 1 and 1½,-yard.
Lidgerwood No. 71 Hoist and No. 72.
Stiff Leg Derrick with 18"x18" mast and boom,
18"x18"x68 feet, complete with extra heavy
Amercan irons rigged for 3-part line.
Concrete Mixers, Concrete Buckets, Steam Rollers, Alr and Steam Drills, Air Compressors,
Pumps, Boilers, Locomotives, Dump Cars, etc.
Address

Willis Shaw Machinery Co.

171 La Salle St., Chicago, Ill.

GOOD CONDITION.

For Sale—Locomotive Crane, Interstate Type, Single Truck, 41 Foot Boom, Lidgerwood Engines, Fine Condi-tion. Located at Middleton, Ohio. Address Jones Brothers, Columbus, Ohio.

BARGAINS IN MACHINERY.	
1-7x10 D. C. S. D. builders sheave holst\$	550.00
3-64 x10 American holst D. D. D. C. engines	600.00
2-7x10 American hoist D. D. C. engines	700.00
3-64x8 Flory D. D. D. C. engine, no boiler	400.00
1-10x12 Lidgerwood D. D. D. C., no boiler	800.00
1-1/2-yard steam power and tilt Smith mixer,	700.00
1-4-yard steam power Ransome mixer on	100.00
wheels, same as new	450.00
1-Double truck Brown hoist locomotive crane,	
with 2-yard bucket	5,800.00
1-Yard, full circle Vulcan steam shovel, equal	
to new	4,000.00
1-10x12 Lidgerwood complete cableway fittings.	2,000,00
	700.00
Address JONES PURCHASING AGEN	CY.
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For Producing **Concrete Aggregates**

of any desired size and uniform size, NO CRUSHER can equal

It can be instantly adjusted to crush material the size of its opening down to 1 inch and finer. It will handle the hardest rock, without distress, and requires less power than other crushers. Price for a real Crusher from \$75.00 up. Let common so Buy the Best. sense be your judge. Investigate.

Beware of cheap improvements. Don't be misled. Write today. Call or address

UNIVERSAL CRUSHER COMPANY

Works 2nd and 10th Sts., West CEDAR RAPIDS, IOWA

Telephone: 1115

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1-45 ton Style A Marion, \$1,950, Good order. At

1—Bucyrus, 45-ton Crane pattern, \$1,300. Big bargain.
At Chicago.

At Chicago. 1-10x12 Hose DC DD Hoisting Engine.

Address

THE CINCINNATI EQUIPMENT CO. CINCINNATI, OHIO

BARGAINS.

MACHINERY BARGAINS.

MACHINERY BARGAINS.

1—Mansfield side crank throttling governor rocker valve engine, about 10x12, \$100.00.

1—No. 0 Root Blower, \$50.00.

1—9x14 double cylinder, double drum, Webster, Camp & Lane very heavy mining hoist on iron base throughout, practically new, with lot of cable for same, \$450.00.

1—Very heavy derrick, will lift 20 tons, complete with hoisting engine for same, wire cables and wire guys. This is a very fine derrick, \$300.00.

1—Very heavy derrick with hoisting engine, wire cables and guys, \$300.00.

3—Small derricks with cable and guy wires, no hoisting engines, \$100.00 each.

1—No. 4 Austin Jaw Crusher with elevator cables, buckets and screen, with small engine to run the stone crusher, \$450.00.

2—Byers double cylinder double drum 6x7 hoisting engine on wooden base, no boiler, \$150.00.

2—gang saws for sawing stone, \$200.00 each.

1—Fine triple hoist for derrick work, \$200.00.

1—6x4x6 duplex pump, \$50.00.

Address Cleveland Belting & Machinery Co., 1922 Scranton Rd., Cleveland, Ohio.

MACHINERY WANTED

SECOND-HAND ELEVATOR AND SCREEN.

Wanted—Second hand elevator and screen suitable for b. 2 Gates crusher. Address FRANK COWEN, Watertown, Wis.

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The best, cheapest and most effective core drill for testing quarries, coal and mineral lands. Borings made for foundations, records furnished of each test, of the foundations and cores taken out 3 or 4 inches in diameter to variable lengths. Any one wishing work of this kind done write me a postal card. Correspondence solicited. Address

214 Woodlawn Ave., Lansing, Mich.

CEMENT WALKS, BUILDINGS, ETC.

Cement sidewalk construction; making concrete blocks and buildings; estimating, profits, etc. Practical book of details, postpaid. 50c.
Address, DeGraff Pub. Co., Peorla, Ill.

EASTERN LIME PLANT.

One of the best equipped in the United States. High calcium quarry running uniformly about 98% pure. Will sell cutright or retain substantial interest in connection with well qualified parties and conduct the sales department in markets well established aiready. Fuel cost, labor and all other details of the lime business well adjusted to production. Plant now running and in first class condition in every particular.

Address RON 762, care ROCK PRODUCTS.

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CEMENT BLOCK PLANT

For Sale—Complete cement block plant with all necessary equipment for making blocks, porch columns, fence posts, door stills, sewer tile, cistern block, covers, etc. Only plant of the kind in good town of 1.000 inhabitants. Good surrounding country. Good schools, good churches. Good surrounding country. Good schools, good church Must be sold. Owner non-resident. Address J. L. CRUKSHANK, Fostoria, Ohio.

SAND LIME BRICK PLANT.

or Lense.—A well equipped Sand Lime Brick eated within reach of the Chicago market; terms attractive.

Address F. S. Colburn, No. 2008 So. Canal St., Chicago.

JAS. B. MACNEAL & CO. CALVERT MORTAR COLORS

Fast Trains Day

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EXCELLENT SERVICE

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"K & J" CARS FOR QUARRIES

Are Heavily Built for

The above car carries 34 tons of stone; abic capacity 42 ft.; gauge track 36 in, 7e build cars to any specifications to tyour work. Catalog 60-J.

THE KILBOURNE & JACOBS MFG. CO.

Plant and Gen'l COLUMBUS. O. NEW YORK

Some Bargains in Quarry Equipment

One No. 8 Austin crushing plant with No. 5 recrusher, elevators, screens, power plant, etc. Very complete and good as new.
One No. 8 Gates plant with No. 4 Crusher, elevator and screens and power. Fine condition.
One No. 73 McCulley plant and No. 4 crusher, elevator, screen and power. Used one season.
Several No. 5's, No. 4's, and No. 3's.

COMPRESSORS

One 16x16x18 McKiernan straight line compressor, capacity 600 feet of air. Ample for 6 to 10 drills. Ready for immediate use. One Ingersoll-Sargent duplex, class H 12x12x14½. Capacity 635 feet of air. Almost new.

STEAM SHOVELS Two 75-ton steam shovels, built especially for handling broken stone. Used less than one year; left the shop late in 1907. Great bargains for anybody who wants loading shovels.

Be sure and write us for prices befo

Centrifugal Concrete Mach.

We have several smaller shovels for stripping and other work.

LOCOMOTIVE CRANES

One 15-ton Interstate, with 44-foot boom, 1-yard clam shell bucket on standard gauge truck. Absolutely first class condition.

Can be seen in operation.
One 10-ton Yale & Towne, 30-foot boom, no bucket.
Absolutely first class condition.
Also have some others.

CARS

Thirty 80,000 capacity Gondola cars, built especially for handling broken stone, equipped with air brake and M. C. B. couplers. All in first class condition.

Twenty 2-yard steel and dump quarry cars, brand new, and a

lot of others.

SCREENS, ELEVATORS, ETC.

We have a lot of standard Gates, Austin and other screens and elevators, friction hoists, and other hoisting appliances. ANY KIND OF EQUIPMENT-SAVE YOU MONEY

MARSH COMPANY,

971 Old Colony Building,

CHICAGO, ILLINOIS

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BAG SAVING APPLIANCE. Shipping Appliance Co.

BALL MILLS.

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Chicago Belting Co.
Gandy Belting Co.
Main Belting Co.
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Sawyer Belting Co.
Stephens-Adamson Mfg. Co.

BLAST HOLE LOADERS. Cyclone Drill Co.

BRICK.

Harbison-Walker Refractories Co.

BUCKETS, DUMPING AND GRAB. Atlas Car & Mfg. Co. Kilbourne & Jacobs Mfg. Co. Sackett Screen & Chute Co., H. B.

BUILDERS' SUPPLIES. Springfield Coal & Ice Co. Wisconsin Lime & Cement Co. Sackett Screen & Chute Co., H. B.

CEMENT BRICK MCHY. Bartlett, C. O., & Snow Co. Martin-Henry Brick Machine Mfg. Co. Peerless Brick Machine Co.

CEMENT HYDRAULIC. Carolina Portland Cement Co. Fowler & Pay. Utica Hydraulic Cement Co.

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CEMENT, PORTLAND.

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Wisconsin Lime & Cement Co.
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Buckeye Fire-Clay Co. Western Lime & Cement Co.

CLAYWORKING MCHY.

American Clay Working Mchy. Co. Bartlett, C. O., & Snow Co. Cummer, F. D., & Son Co.

COMPRESSORS.

Advance Pump & Compressor Co.

CONCRETE BLOCK MCHY.

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Centrifugal Concrete Machine Co.
Concrete Stone & Sand Co.
Marsh Co.
Perfection Block Mchy. Co.
Pettyjohn, The, Co.
Sioux City Cement Mchy. Co.
U. S. Kellastone Co.

CONCRETE MIXERS.

Cement Tile Mchy. Co. Chalmers & Williams. Kent Mach. Co. Marsh Co. Milwaukee Concrete Mixer & Machine Co. Williams Contractors' Supply Co.

CONCRETE BEADS.

Carolina Portland Cement Co.

COLORINGS, BRICK AND MORTAR

Chattanooga Paint Co. Clinton Metallic Paint Co. Macneal, James B., & Co. Ricketson Mineral Paint Works. Williams, C. K., & Co.

CONCRETE REINFORCEMENTS.

American Steel & Wire Co. Buffalo Wire Works Co.

CONVEYORS.

Austin Mfg. Co.
Bartlett, C. O., & Snow Co.
Caldwell, H. W., & Sons Co.
Ersham, J. B., & Sons Mfg. Co.
Power & Mining Machy. Co.
Sackett Screen & Chute Co., H. B.
Stephens-Adamson Mfg. Co.

CRUSHERS.

Allis-Chalmers Co. Allen Edgar American Manganese Steel Allis-Chalmers Co.
Allen Edgar American Manganese Ste
Co.
Alsing, J. R., Eng. Co.
Austin Mfg. Co.
Bacon, Earl C.
Bartlett, C. O., & Snow Co.
Butterworth & Lowe.
Chalmers & Williams.
Chrome Steel Works.
Ersham, J. B., & Sons Mfg. Co.
Eureka Stone & Ore Crusher Co.
Good Roads Machinery Co.
Kent Mill Co.
Marth, Henry.
McDonnell Boiler & Iron Works.
Pennsylvania Crusher Co.
Fower & Mining Machy. Co.
Symons Brothers.
Sturtevant Mill Co.
Taylor Iron & Steel Co.
Universal Crusher Co.
Williams Contractors' Supply Co.
Williams Contractors' Supply Co.
Williams Pat. Crusher & Pulyerizer Co.

CUT GEARS.

Nuttall, R. D., Co.

DRAINAGE FITTINGS.

Wade Iron Sanitary Mfg. Co.

American Well Works, The. Cyclone Drill Co. Keystone Traction Drill Co. Howell Mining Drill Co.

DRYERS.

DRILLS.

Alsing, J. R., Eng. Co.
American Process Co.
Bartlett, C. O., & Snow Co.
Cummer, F. D., & Son Co.
Power & Mining Machinery Co.
Ruggles-Coles Eng. Co.

DRYER CARS.

Ernst Wiener Co. Kilbourne & Jacobs Mfg. Co. Power Mining & Mch. Co. Sackett Screw & Chute Co., H. B.

DUMP CARS.

Atlas Car & Mfg. Co.
Austin Mfg. Co.
Chase Foundry Mfg. Co.
Kilbourne & Jacobs Mfg. Co.
Power & Mining Machy. Co.
Sackett Screen & Chute Co., H. B.
Stephens-Admson Mfg. Co.
Ernst Wiener Co.

DUMP WAGONS.

Troy Wagon Works Co.

DYNALITE, DYNAMITE AND POWDER.

American Dynalite Company. Aetna Powder Co. DuPont Powder Co. Independent Powder Co.

Bacon, Earl C.
Buckbee, J. C., Co.
Fuller Eng. Co.
Schmatolla, Ernest.
Spackman, Henry, Eng. Co.

ENGRAVERS.

EXPANSION BOLTS

Farrington, H.

FIBRE MCHY.

Ohio Fibre Mch. Co. Shuart-Fuller Mfg. Co.

FIRE BRICK.

Buckeye Fire-Clay Co. Carolina Portland Cement Co. Harbison-Walker Refractories Co. Louisville Fire Brick Co. Union Mining Co.

GAS AND GASOLINE ENGINES. Cyclone Drill Co. Power & Mining Mch. Co.

GAS PRODUCERS.

Duffs Patents Co. Power & Mining Mch. Co.

GOOD ROADS.

Good Roads Construction Co. GYPSUM

Carolina Portland Cement Co. King, J. B., & Co. Plymouth Gypsum Co. Niagara Gypsum Co. U. S. Gypsum Co.

GYPSUM MCHY.

Butterworth & Lowe. Cummer, F. D., & Son Co. Ersham, J. B., & Sons Mfg. Co. McDonnell Boiler & Iron Works.

GYPSUM SPECIALIST. Jones, F. A., M. E.

HARDENING CYLINDERS. Alsing, J. R., Eng. Co. American Clay Machinery Co.

HYDRATING CYLINDERS.

Alsing, J. R., Eng. Co. Kritzer, The, Co.

HYDRATING MCHY.

Kritzer Co., The.

LAND AND INDUSTRIAL AGENT. Richards, M. V.

LIME.

LIME.

A. & C. Stone and Lime Co.
Basic Products Co.
Carolina P. C. Co.
Farnam-Cheshire Lime Co.
Farnam-Cheshire Lime Co.
Fowler & Pay.
Hart & Page.
Glencoe Lime & Cement Co.
Ohio & Western Lime Co., The.
Kelly Island Lime & Trans. Co.
Marbiehead Lime Co.
Mitchell Lime Co.
National Lime & Stone Co.
National Lime & Stone Co.
New Jersey Lime Co.
The Scioto Lime & Stone Co.
Western Lime & Cement Co.
Wisconsin Lime & Cement Co.

LIME, HYDRATED.

Kelley Island Lime & Transport Co. Ohio & Western Lime Co., The. Marblehead Lime Co. New Jersey Lime Co. National Lime and Stone Co. National Mortar & Supply Co. The Scioto Lime & Stone Co. Western Lime & Coment Co.

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Steacy-Schmidt Mfg. Co.

LOCOMOTIVES. Davenport Locomotive Wks. Ernst Wiener Co.

LUBRICANTS-OILS.

Cosmo Lubricating Co.

MANGANESE STEEL

Allen Edgar Manganese Steel Co. Taylor Iron & Steel Co.

' MATERIAL CARS. Chase Foundry Mfg. Co.

METAL LATE

Carolina Portland Cement Co. Buffalo Wire Works Co.

MORTAR GAUGE.

Ormsby Mortar Gauge Co.

PERFORATED METALS. Johnson & Chapman Co.

PNEUMATIC TOOLS. Howell Mining Drill Co.

PLASTER MCHY.

Butterworth & Lowe, Cummer, F. D., & Son Co. Dunning, W. D. Ersham, J. B., & Sons Mfg. Co. Williams Pat. Crusher & Pulverker Co.

PLASTER.

Carolina Portland Cement Co. King, J. B., & Co. National Mortar & Supply Co. Plymouth Gypsum Co., The. U. S. Gypsum Co.

PULVERIZERS.

American Pulverizer Co, Alsing, J. R., Eng. Co. Kent Mili Co. Lehigh Car, Wheel & Axle Wks. Pennsylvania Crusher Co. Raymond Bros. Co., The. Sturtevant Mill Co. Ernst Wiener Co. Williams Pat. Pulverizer Co.

RAILROADS.

Illinois Central R. R. Monon Route.

RAILROAD MATERIAL.

Atlas Car & Mfg. Co. Kilbourne & Jacobs Mfg. Co. Sackett Screen & Chute Co., H. B. Ernst Wiener Co.

ROOFING MATERIAL

Carolina Portland Cement Co. Barrett Mfg. Co. U. S. Kellastone Co.

SAND.

Ottawa Silica Co. Reynolds & Co., E. J.

SAND-LIME BRICK MCHY.

American Clay Working Mchy. Co. American Sand Stone Brick Co. Wiebe Engineering Co.

SCALES.

Richardson Scale Co.

SCREENS.

Butterworth & Lowe.
Ersham, J. B., & Sons Mfg. Co.
Johnson & Chapman Co.
Power & Mining Mchy. Co.
Sackett Screen & Chute Co., H. B.
Stephens-Adamson Mfg. Co.
Sturtevant Mill Co.

SCREEN SECTIONS.

Johnson & Chapman Co.

SEWER PIPES. Buckeye Fire Clay Co.

STEAM SHOVELS.

The Bucyrus Co. The Vulcan Steam Shovel Co.

STUCCO RETARDER. Chemical Stucco Retarder Co. Ohio & Binns Retarder Co.

TUBE MILLS.

Alsing, J. R., Eng. Co. Power & Mining Machy. Co.

TYPEWRITERS.

Oliver Typewriter Co.

WATER PROOFING.

Barrett Mfg. Co.
Carolina Portiand Cement Co.
Ceresit Waterproofing Co.
De Smet, George W.
Marblehead Lime Co.
Maumee Chemical Co.
U. S. Kellastone Co.
U. S. Kellastone Co.
Wadsworth, Howland & Co., Inc.
Wisconsin Lime & Cement Co.



Here's a Concrete Mixer that makes good in every sense.

By that we mean that it mixes a uniform batch—thoroughly—quickly—without fuss or unnecessary work. That it runs smoothly (all the time) and stands the gaff. Has a drum that does the work the way it ought to be done, without clogging, slopping, balling or blocking.

Needs no blocking up as do wooden frames. Self containedportable--always ready for the job.

OUR PROPOSITION:

It will cost you nothing to investigate the Milwaukee Mixer. We'll pay the freight to land one of these mixers at your

work. All we ask you to do is to give it the stiffest 5 days' trial that you know how to put it through—then if it doesn't make good (but it will), send it back—charges collect—and well, let you alone. Isn't that a fair enough proposition? We'll stake

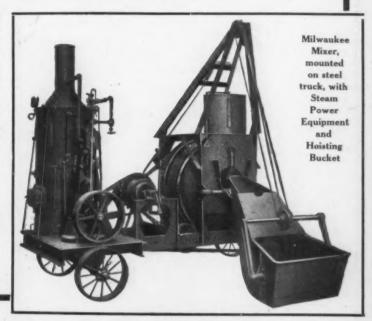
our trouble against yours and take the "chance" of a failure. Think it over—but not too long. Better ask for a catalog now.



MILWAUKEE MACHINERY CO.

MILWAUKEE, WIS.

Representatives Wanted in Unassigned Territory





"KENT" **CONTINUOUS MIXER**

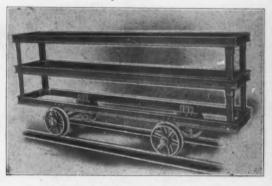
"The Mixer that measures and Mixes"

"You fill the Hopper, the Mixer does the rest"

Simple, reliable, economical, durable and moderate in price

Write for Catalogue and Prices to

The Kent Machine Co. 306 N. Water St., Kent, O.



The "KENT" Block Cars, Transfer Cars, etc.

Advertisers-Take Notice

Changes of Copy must be in this office by the Fifteenth of the month, if proofs are desired; if no proofs are required the desired changes can be mide if copy is received by noon of the Nineteenth.

New Advertisements to insure proper classification, should be in this office by the Fifteenth of the month, but they can be inserted in the last form going to press if received by the Nineteenth. The punctual publication of the paper admits no deviation from these rules. Advertisers are earnestly requested to co-operate with us.

THE FRANCIS PUBLISHING CO., 355 Dearborn Street

How to Own the Oliver Typewriter for 17c a Day

You don't have to draw on your Bank Account when you pay on the Penny Plan.

You need not disturb your Dollars. Keep them at work earning interest!

We offer our newest model, the Oliver Typewriter No. 5fresh from the factory-for Seventeen Cents a Day.

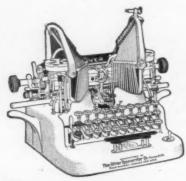
The plan is printed in "black and white" on the Application Blank below.

Simply fill out the blank, attach the small first payment, send it in, and on comes the Oliver!

No tedious wait! No red tape! No long-drawn-out correspondence!

You quickly own your Oliver and scarcely notice the out-You can have the use of your machine while pennies are 'paying the freight.

You will never have a better chance to test the power of pennies.



The Oliver is everywhere.

It's the universal typewriter. Reels off real work with the ease and speed demanded by this mile-a-minute age. Wherever you turn—in Business Offices, great or small—in the quiet of the Home—in the roar of the Railroad and Telegraph service—in the seething maelstrom of modern Newspaperdom—in countless kinds of service—it's the sturdy, strenuous Oliver that's "making the wheels go 'round."

The_ OLIVER Typewriter

The Standard Visible Writer

You need your Oliver now. It's yours almost for the asking. The biggest hundred dollars' worth in America—for Seventeen Cents a Day! Send along the Application Blank, with a small first payment of \$15 as an evidence of good faith.

Your check is good—or send draft, postoffice or express money order.

The Oliver Typewriter Co.

47-55 Dearborn St., Chicago, Ill.

THE OLIVED TYPEWRITER CO.

APPLICATION BLANK

THE CALL AT A STATE OF STATE O
Gentlemen:—I accept your offer of the latest model No. 5 Oliver Standard Typewriter for Seventeen Cents a Day. Enclosed please find \$15 as evidence of good faith. I agree to save 17 cents a day and remit the balance, \$85, in monthly installments. Title to remain in your name until the machine is fully paid for.
Name
Address
Town
References

MACHINERY

Industrial Plants



We manufacture machinery for transmitting power, and for elevating and conveying materials in and about cement plants, rock crushing plants, lime plants, mortar works, plaster works, and other industries.

We manufacture screw conveyors, belt conveyors, and all sorts of chain and cable conveyors, for handling rock, lime, sand, etc.

We manufacture elevators, also, for handling the same kinds of material. Our lines include shafting, couplings, bearings, collars, pulleys, gears, rope sheaves, sprocket wheels, elevator buckets and bolts, steel elevator casings, etc.

We have our own foundry, sheet metal department and machine shop. We employ first-class help in all departments and use high-grade materials.

When you are in need of anything in our line, try us.

Catalog No. 34

H. W. Caldwell & Son Co.

17th St. and WesternAve., Chicago

Fulton Bldg., Hudson Terminal, No. 50 Church St. NEW YORK CITY

The Pulverizer



That is Guaranteed to do Your Work

Write for Particulars

American Pulverizer Co. 410 Jaccard Bldg. St. Louis, Mo.

GOOD ROADS CONSTRUCTION

General Offices, Byrd Bldg., Memphis, Tenn.

Our Quarry Facilities are of the Best.

The build municipal street work, turnpikes and give attention to all construction work of a similar character. Our organization is backed by twenty-five years experience, and we are in a position to furnish specifications and estimates promptly. Individuals, Corporations or Municipal authorities are invited to correspond with us.

ALLIS-CHALMERS CO

Style|"K" Rock and Ore Breakers

NOICLOGGING

The stone spouts directly from the hopper into the opening between the head and the concaves. This arrangement enhances the feeding capacity and overcomes the tendency to arch and prevent wear on spider.

GENERAL OFFICES: Milwaukee, Wis. Have Unobstructed Feed Openings

NO LOSS WORKING TIME

The hopper rests directly on [the top of the shell, near the upper ends of the concaves, thus reducing the height of breaker from foundation to feeding floor.

Built to Meet Operating Conditions

District Offices in all Principal Cities

FARREL ORE AND ROCK

CRUSHER

USED IN ALL PARTS OF THE WORLD-LARGE RECEIVING CAPACITY-SPECIALLY DESIGNED AND CONSTRUCTED FOR HARDEST KIND OF WORK

COMPLETE CRUSHING PLANTS DUR SPECIALTY
• SEND FOR CATALOGUE •

EARLE C. BACON, ENGINEER.



You Need Our Crusher Oil!

Its Three Points of Excellence:

- 1st. It eliminates hot bearings.
- 2d. It outlasts other lubricating oils 40% to 50%.
- 3d. It has a fire test of 1200° F.

We will ship you a barrel of Cosmo Crusher Oil anywhere east of the Rocky Mountains, freight prepaid. If, after trial, you feel that it has not the qualities which we claim for it, you may return the remainder at our expense. If satisfactory, to be paid for. No higher in price than other crusher oils.

Cosmo Crusher Oil can be used on any make of crusher.

ORDER A BARREL TODAY

THE

COSMO

LUBRICATING COMPANY

157 to 161 North Ada Street, Chicago, Ill. New York Office: 25 Broad St., New York, N. Y.

JULY 2



The Kennedy Gyratory Crusher

THE ONLY CRUSHER

With a Ball and Socket Self-Aligning Eccentric

This crusher is proving its superiority over all other makes of crushers in all parts of the country. We can give interesting data from operators, regarding the greater capacity, small cost for repairs, perfect alignment, great reduction in power to operate and perfect coolness of the eccentric.

We also Build Cement Making Machinery

Kilns, Dryers, Coolers, Crushing Rolls, Ball Mills, Tube Mills, Elevators, Conveyors and Revolving Screens.

CHALMERS & WILLIAMS, Inc., 1929 Commercial Nat'l Bank Bldg., CHICAGO



HOWELLS' Celebrated Ball Bearing Heavy Geared Post Drills

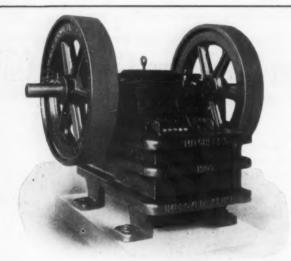
For boring anything that an Auger will penetrate.

Awarded Gold Medal, St. Louis.

We make 40 different styles machines run by Hand, Compressed Air and Electricity for boring Fire Clay, Coal, Rock, Rock Salt, Gypsum and Plaster Rock. Send to day for our handsomely Illustrated Catalogue.

HOWELLS MINING DRILL CO., PLYMOUTH, PA. U. S. A.

(ESTABLISHED 1878.)



20 DIFFERENT SIZES

Mitchell's Improved Crusher

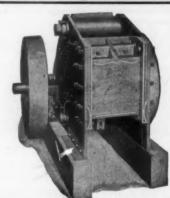
reduces any refractory material from 4 inch size to any size desired down to sand in one operation. It is instantly adjustable while running. You will appreciate the convenience and money-saving of this operation if you understand crushing problems.

There is no crushable substance too hard for the

There is no crushable substance too hard for the No. 3 Mitchell Improved. It's a rock crusher built with rock-like solidity. Ten minutes with our pamphlet "Mitchell Improved Crushers and what they will do" explains all these features. Send a postal for it.

EUREKA STONE & ORE CRUSHER CO

Cedar Rapids, Iowa



No. 5 Champion Steel Pock Crusher, 11x26 in Opening.

Speaking ROCK CRUSHERS

there are over 3,000 Champion Machines in use. Every machine is speaking for us by the good work it is doing.

Champion Crushers are made of steel. They work well and last well. We offer them as the best and most economical crushers made.

Five different sizes, from 75 to 300 tons daily capacity. Elevators, screens, conveyors, engines, boilers. Complete plants installed.

HANDSOME CATALOGUE FREE ON APPLICATION

The Good Roads Machinery Co. KENNETT SQUARE, PA.

Tell 'em you saw it in ROCK PRODUCTS

VOU HAVE FOUND a rock crusher combining the continuous crushing movement, large capacity, uniform product and durability of the old-line gyratory breaker, with the advantages of low feed and reduced weight.

These features are found in one machine and in only one-the

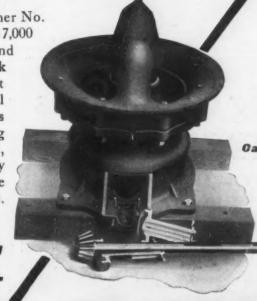
Grusher

HEIGHT AND WEIGHT-The Symons Crusher No. 5 measures 3 ft. 9 in. from sills to rim; weighs 17,000 lbs. Other sizes show similar economy in height and weight. STRENGTH-The short stocky frame, the thick three-arm bottom spider, the heavy crown and the great central bolt, clamping frame and crown together-all guarantee a degree of strength unattainable in crushers of the lever-shaft type. DURABILITY-The long eccentric bearings, dust proof and automatically oiled, the absence of the suspension bearing-the simplicity of the entire machine-these features guarantee reliable and economic operation under the severest conditions.



Majestic Bldg.,

Milwaukee, Wis.



Write for Catalog No. 156



A Tempered Steel Jaw Plate for Blake Type Crushers

Canda Tempered Steel Crushes faw Plate

Patented March 31, 1908.

The Canda Tempered Steel Jaw Plate for Blake Crushers is composed of Forged and Rolled Chrome Steel Bars, cast-welded and also mechanically interlocked into a backing of tough steel—and the wearing face is tempered to extreme hardness. equipped to supply both corrugated and smooth face plates for all sizes and makes of Blake Crushers.

I The Canda method of cast-welding forged and tempered steel bars into a mild and tough Steel Backing, is adapted also to the construction of Cone Heads for Gyratory Crushers, Segments for Corrugated Rolls, etc., etc. Our products in this line are sold with our special guarantee that they will wear longer, give better satisfaction and, at our price, prove more economical than any others now on the market.

- Send for Descriptive Pamphlet-

J. F. Spellman, 202 Century Building, Denver, Colo.

Represented by George T. Bond, Easton, Pa.

George W. Myers, San Francisco, Cal.



AUSTIN GYRATORY CRUSHER

The World's leading rock and ore breaker.

The only self lubricating

The only Crusher having double countershaft bearing. Simple construction, correct design.

Thousands in use.

Plans and specifications furnished for any sized plant. Send for Catalogue No. 17. All experienced users recognize that the efficiency and durability of the suspension bearing as applied to Gyratory Crushers, depends upon locating the bearing at the point of least gyration or movement of the main shaft.

main shaft.

A perfect suspension can be made only by locating the bearing at the point where there is no movement of the shaft. That being a mechanical impossibility it follows that superiority is obtained in fixing the bearing at the point of least gyration of the shaft.

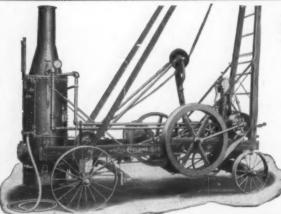
As the accompanying cut will show, the movement of the shaft at the point of suspension in the Austin Crusher is reduced to the minimum and practically eliminated. Consequently the highest possible degree of efficiency and durability is obtained.

Austin Manufacturing Co., Chicago



New York City Office 1682 FULTON BUILDING

Mussens Ltd., Montreal, Can., Canadian Sales Agents.



THE CYCLONE WINS BY BIG ODDS

The Competitive Drilling Test

just finished at the Dolese-Shepard Company's quarry at Gary, Illinois, has proven the superiority of Cyclone Drills, finishing far ahead of any of the six drills in the test. Total number of feet drilled, 1595; drilling 5 ft. 10 in., per hour, or 1 ft. 6 in. more per hour than the highest record of any other machine. Holes were all 5\frac{1}{2} inches diameter in hard time-stone rock; not one penny was spent for repairs of any character.

This is just another record of the many which the Cyclone Drill has to its credit; let us tell you more about Cyclone Drills and their records.

WRITE US TO-DAY-DEPT. "C"

THE CYCLONE DRILL COMPANY,

ORRVILLE, OHIO

CHICAGO OFFICE-419 Fisher Bldg.

NEW YORK OFFICE-1456 Hudson Terminal Bldg.

For Big Blast Holes KEYSTONE CABLE DRILLS



Keystone Traction Drill Co.

Monadnock Bldg., CHICAGO

BEAVER FALLS, PA., 170 Broadway, New York

TISCO MANGANESE STEEL CHAIN

IS AS STRONG AS ITS STRONGEST LINK

And when compared with malleable chain will outlast it from five to twelve times.

Its ability to resist wear when running in dust, or handling abrasive, gritty material is unapproached and it is guaranteed to prove economical.

Here is the solution of your chain troubles and we await the opportunity to prove it over our guarantee.

TAYLOR IRON & STEEL CO.

HIGH BRIDGE, NEW JERSEY



Deep Blast Hole Drilling

Is accomplished more economically than by any other method with the

"American" Drilling Machines

There is 40 years' experience behind these drills—they are standard.

Where electric power is available, equipped with motor they form the most portable and economical drill for quarry use.

Equipped with any power they are backed by the experience and reputation of the world's oldest and largest builders of this kind of drilling machinery.

Tell us your blast hole requirements. We have 59 regular styles and sizes of machines for your selection, made in types to meet every possible condition of work.

Write for our new catalog No. 105, the most complete "Drill-Hole" catalog ever issued.

THE AMERICAN WELL WORKS

General Office and Works: AURORA, ILL., U. S. A. Chicago Office: First National Bank Building

Tell 'em you saw it in ROCK PRODUCTS

Cer the

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for

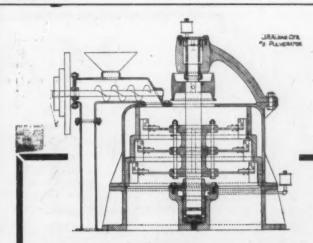


95-C IN SANDUSKY PORTLAND CEMENT COMPANY'S QUARRY

Bucyrus Shovels Are Loading Crushed Stone and Digging Blasted or Unblasted Cement Rock in the Leading Quarries in the United States.

THE BUCYRUS CO.

Branch Offices NEW YORK SAN FRANCISCO South Milwaukee, Wis.



THE ALSING PULVERATOR No. 2

These machines are designed for very fine grinding and will reduce the material from a 2½ inch size to an impalpable powder. The grinding is done by the percussion principle instead of abrasion, etc., as in other makes. These Pulverators have demonstrated by actual use a great saving in cost of wear, tear, and maintenance. Simple in construction with fewer intricate parts to get out of order. They are so substantially constructed they will last a lifetime.

The J. R. Alsing Engineering Co.

INCORPORATED 90 WEST STREET, NEW YORK



"LITTLE GIANT" LOADING BLASTED ROCK.
Diamond Portland Cement Co., Middlebranch, O.

Giant Boom Shovels, six sizes, 1½ to 5 cubic yard dippers. Little Giant Shovels, two sizes, 1½ cubic yard dippers. Revolving Shovels, three sizes, ½ to 1½ cubic yard dippers. Steam or Electric Power. Traction Wheels or Railroad Trucks. Send today for booklets.

VULCAN

Steam and Electric Shovels

are the best that money can buy because they are correctly designed and substantially built. Every part is made of material which we know from our thirty years' experience in high class steam shovel building to be the best for the purpose. Before shipment each shovel is set up complete in our yards, thoroughly tested under full steam and all parts carefully inspected and adjusted. You are invited to witness this test and the shovel isn't shipped until both of us are satisfied that it is right in every respect. In addition to this, we give you the benefit of a 10 day trial test in your own quarry and you don't have to accept the shovel until we have demonstrated on your own work that it is just as represented. Every shovel we build is covered with an iron clad guarantee to give complete satisfaction. Write us today, giving a description of your material and the amount you wish to handle per 10 hours and we will promptly send full information, specifications, prices, etc., of a shovel which we will guarantee to do your work satisfactorily.

THE VULCAN STEAM SHOVEL CO.

Toledo, Ohio

NEW YORK OFFICE: 45 Broadway; Telephone 4039 Rector DENVER OFFICE 305 Appel Bldg.

CHICAGO OFFICE: 1301-2-3 Great Northern Bldg.; Telephone Harrison 2838



MAXECON

Means MAXimum of ECONomy

Years of experience with the assistance of our hundreds of customers has found THE SOLUTION OF GRINDING HARD MATERIALS. The MAXECON PULVERIZER combines highest EFFICIENCY, greatest DURABILITY and assured RELIABILITY. Uses the LEAST HORSE POWER per capacity. Embodies the features of our Kent Mill with improvements that make it MAXECON.

WE DO NOT CLAIM ALL of the CREDIT for this achievement

We have enjoyed the valuable suggestions of the engineers of the Universal Portland Cement Co. (U. S. Steel Corp.), Sandusky P. C. Co., Chicag Portland C. Co., Marquette Cement Mfg. Co., Western P. C. Co., W. H. Harding, Prest., Coplay P. C. Co., Cowham Engineering Co., Ironton P. C. Co., Alpena P. C. Co., Castalia P. C. Co., Pennsylvania P. C. Co., and many other patrons.

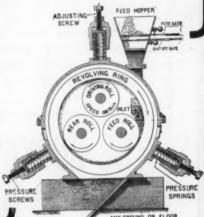
THE RING WOBBLES

The FREE WOBBLING POUNDING RING instantly and automatically ADAPTS its position to the variations of work.

Its GRINDING ACTION is DIFFERENT than any other; besides the STRAIGHT rolling action of the rolls, the SIDE to SIDE motion of the ring makes the material subject to TWO crushing forces and DOUBLE OUTPUT results.

KENT MILL CO.

170 BROADWAY, NEW YORK CITY LONDON, W. C., 31 HIGH HOLBORN CHARLOTTENBURG 5, WINDSCHEID STRASSE 40, BERLIN



The Fuller-Lehigh Pulverizer Mill



Cement Companies
equipped with
Fuller Mills
advertise the fact that
the consumer
gets
38 pounds more
of the

REAL CEMENT

IMPALPABLE POWDER

every barrel of

cement produced by

The Fuller Mill than by any other

Produces Commercially

Cement having a higher percentage of Impalpable Powder than can be obtained by any other mill. Tests show that the tensile strength of a 1-5 mortar made with cement pulverized by the Fuller Mill is higher than the tensile strength of a 1-3 mortar made with cement pulverized to the fineness required by the Standard Specifications.

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Capacity is greatly increased, often doubled, by prompt removal of the fines as fast as formed. In the old method of operation, the fines were fed in with the coarse particles, cushioning the crushing action, and retarding the whole operation.

Osborne Pneumatic Apparatus removes the fines continuously, leaving the coarse particles for further reduction.

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Better ask for catalogue of Reilly Multicoil Feed Water Heaters at the same time.

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NOW

We will guarantee (and our guarantee is worth something) that

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Moreover-

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Saving of Machinery and Operation

The Raymond Mills will take the material direct from crusher or rolls and thus save the expensive preliminary grinders necessary with other types of mills.

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We will also guarantee that the finished product from the Raymond Mills will be 98% 100 mesh fine and 92% 200 mesh fine.

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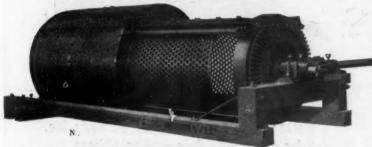
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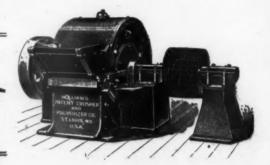


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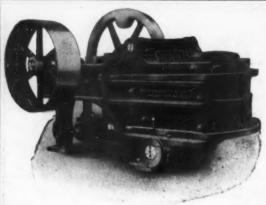
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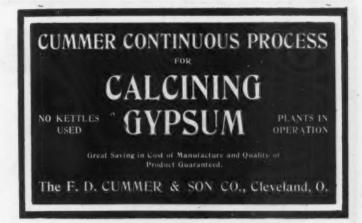
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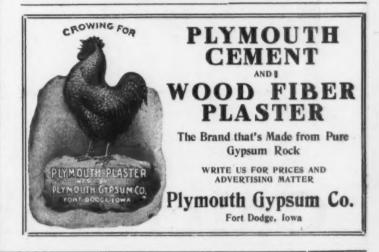
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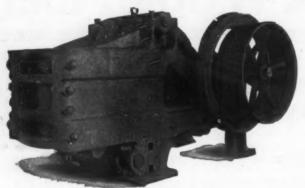
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For Mixing Hair Fibre, Wood Fibre and Retarder with Dry Plastering Materials.

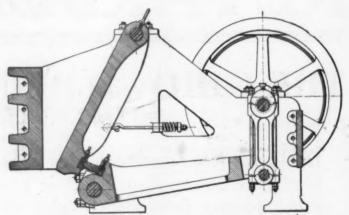
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Jaw and Rotary Crushers for Gypsum, Reels, Vibratory Screens, Hair Pickers and Transmission for applying power.



EHRSAM NO. 4 JAW CRUSHER,

This machine will handle large chunks and reduce from 30 to 40 tons of Gypsum per hour to 24-inch maximum or smaller if wanted.



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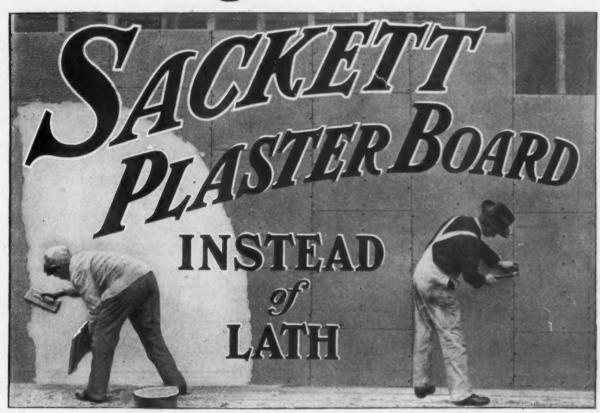
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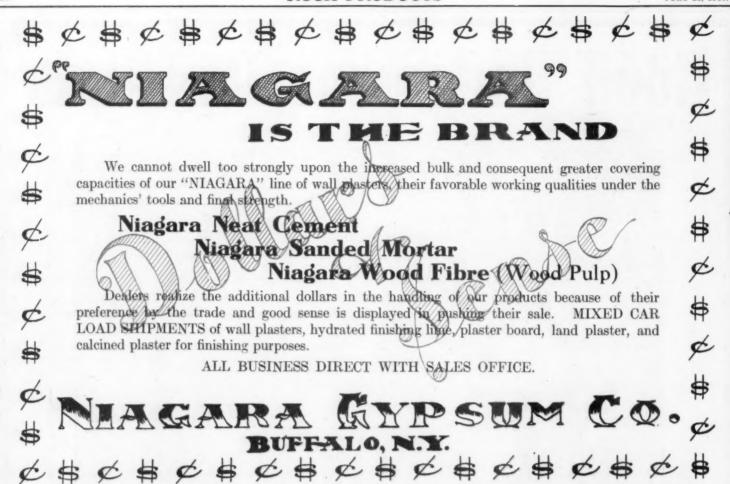
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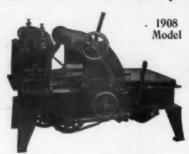
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The Shuart-Fuller Improved Fiber Machine



Has an automatic, proportional, increasing feed, which keeps grade of fiber uniform from start to finish, and holds machine to highest possible rate of production for the grade of fiber and number of saws. Does not begin with fiber and end with dust, nor fall off in rate of production on each log, from 40 to 80 per cent as do the ordinary non-increasing feed machines. Works logs up to 24x24 inches. No royalty string attached to sale. Pay no attention to misrepresentations of our competitors, but write for descriptive circular and terms to

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Breakdown Jobs



are right in our Carrying line. an immense stock of blanks, we can fill your order at once.

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A roof with NO seams, NO joints, NO laps, NO nails, NO coal tar, NO asphaltic compounds, NO gravel, NO waterproofing cements. A roof of unusual density, amazing elasticity, strong, tough and resilient, weighing only two pounds per square foot.



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Can be applied to any kind or form of structure as a plane surface, or if desired with shingle or tile effect.

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After many years of incessant investigation, of tireless toil and exhaustive experiments, we have at last succeeded in producing a perfect roof

A monolithic roof with a crushing and tensile strength far superior to Portland Cement Concrete, absolutely

Fire Proof and Water Proof

The modern roof-Elastic, Economical, Resilient, Durable

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The Improved Peerless One Man Cement Brick Machine

Equipped with new tamping device, which tamps ten bricks in the machine at one operation, making 12,000 perfectly formed bricks in ten hours.



The superiority of the Peerless Brick Machine was demonstrated conclusively at all of the recent conventions.

It is the greatest invention in the industry. Simple, strong and durable. Combines all the advantages of every other machine at the smallest cost.

? The most successful and most easily operated one-man brick machine ever made.

Write at once for particulars.

Peerless Brick Machine Co.

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The Schenk Cement Drain Tile Machine

Is conceded by all who are familiar with the concrete machinery business to be absolutely the most perfect and the most successful machine in the field; upon its merits the cement drain tile industry has been built, and on account of its success other machines have been constructed, but no machine at the present date surpasses the Schenk Machine for capacity durability, convenience, economical operation and for satisfaction.

We sell the Schenk on an Iron Clad Guarantee, backed by the largest exclusive concrete machinery manufacturers in the World.

Our free catalog, "Money In Cement Tile," will give you interesting information relative to the proper equipment, the construction of buildings, the amount of capital required, the amount of profit to

be expected; in fact, it tells how to start a plant for the manufacture of cement drain tile and just what you will be able to realize on your investment.

Write for it today.

The Cement Tile Machinery Co.

Creators of The Cement Drain Tile Industry. Rath St., Waterloo, Iowa:

IT DOES PAY!

THE Marsh Co., whose offices are located in the Old Colony Bldg., Chicago, have advertised in ROCK PRODUCTS continuously from the time of their first starting in business. Read Mr. Geo. Marsh's statement concerning results obtained.

Chicago, Ill., Oct. 21, 1909.

The Francis Publishing Company.
355 Dearborn Street, Chicago, Ill.

Gentlemen:-

The writer of this letter has known your paper, Rock Products, from its first issue. As you will doubtless remember when you started this paper the writer was Manager of the Crusher Department for the Gates Iron Works, later Allis-Chalmers Co. While with that company we used Rock Products for our crushing machinery, as you will remember, quite extensively. Later when the Manager for the Contractors Supply and Equipment Co., the writer used your paper for advertising our concrete mixers and other contractors and quarry machinery. Since this company was organized, we have used it for our crusher and mixer.

It gives us pleasure to testify that for putting anything before the trade that you reach, we have never used anything which gave better results. The number of bona fide inquiries which led to eventual sales was remarkably great.

It has always been a great advantage to us that your representatives have been so wide awake in looking out for our interests as we suppose they do with other advertisers' interests, in traveling about the country, and I can recall a number of sales that came directly through pointers given by you to us from information received on the road.

You need not have any hesitancy in referring any doubtful inquirer to us in regard to the value of your advertising columns.

Very truly,
MARSH CO.
Per (Signed) G. C. Marsh.

It has paid Mr. Marsh It will pay you.

There are others of whom similar information may be obtained. A great number of them. We will tell you about them later.

Rock Products

355 Dearborn Street.

CHICAGO

Concrete Blocks

Highest Attainment of the Concrete Industry

MADE BY CENTRIFUGAL FORCE

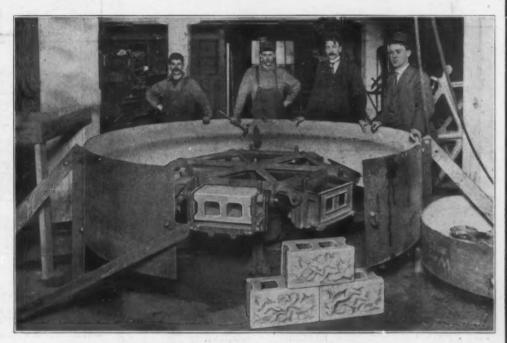
Strictly a High Class Factory Proposition Speedy and Economical. The machine does the original mixing and piling up the finished product.

No Tamping. The mixture is poured into the moulds, then revolved rapidly, producing a pressure of thousands of pounds, uniformly, on every part of the block. The excess water is then extracted as a fine mist, and in about sixty seconds the blocks are ready to be removed from the moulds.

The Way it is Done. Take a West Slush Mixwith any suitable aggregate and after a thorough mixing pour into the moulds successively until all are filled. Then throw the belt upon the service pulley for one minute or less at a high speed with the development of tremendous pressure in the fully perfected Centrifugal Machine. Remove the finished blocks from the molds and leave them on the pallets for a few hours. The blocks are then ready for storage in the yard or can be used in the wall within 12 hours. Fully protected by patents. Standard size machines in operation more than 2 years.

Centrifugal Concrete Machine Company

805 Corn Exchange Bank Bldg. CHICAGO, ILL.



This machine makes 600 blocks in a 10-hour day, 8"x8"x16"



TO OUR PATRONS, NEW and OLD

The addition of the famous **Miracle** interests to our own extensive line of concrete machinery, makes it possible for us to furnish you anything in the line of Mixers, Molds, Forms and Cement Workers' Hand Tools.

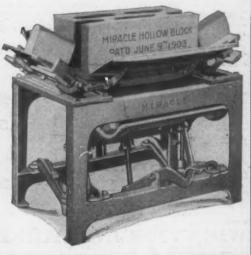
We are now the Leading Manufacturers of Concrete Machinery in the United States. You do not need to look elsewhere. We have it. All goods are sold on an absolute guarantee to be free from defects in

workmanship and material.

We also have Waterproofing for Cement Blocks and Stucco work. We issue a general catalogue as well as special circulars. Write us for the information.

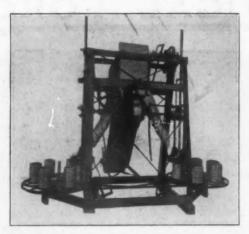
MARSH CO., 971 OLD COLONY BLDG.

BLDG. Chicago, III.



JULY 22, 191

McCracken Double Tile Machine



The McCracken Double Tile Machine makes all sizes of cement tile from 4 to 16 in. in diameter at the rate of from 10 to 20 tile per minute. Also makes building blocks or construction tile 8x8x16 at the rate of 2000 to 3000 per ten hour day.

The machine will make two different sizes of tile at the same time or building blocks and tile at the same time, or either end of machine can be used without using the other.

The machine has no cams and runs just as smooth at high speed as when running slow. Takes less labor per 1000 tile than any other machine.

Tile are packed so hard that the large sizes can be carried without the use of pallets. Machine is very simple and strong and runs very light, and elevator can be started and stopped without stopping the machine.

See the McCracken Machine before you buy. Write to

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The Sioux City Cement Machinery Company 219 4th Street, SIOUX CITY, IOWA

The Chase Roller Bearing Car FOR CEMENT, BLOCK AND TILE



BOTTOM AND SIDE DUMP CARS, TRANSFER CARS, TURNTABLES, SWITCHES, ETC.

You cannot afford to overlook the necessity of handling your material and product as economically as your com-petitor. Our goods will help you do this.

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Chase Foundry Manufacturing Co. COLUMBUS, OHIO

SAND LIME OR SILICATE BRICK



This plant located at South River, N. J., was formerly intended to operate under the "Division System" but is now being reconstructed to conform in every detail to the Wiebe-Hydro-Lime-Silicate-Process, and will be when completed the largest plant in the United States with a daily capacity of beautiful, and unexcelled.

SAND DRYER

Dating as far back as 1901, ben the manufacturing of mmercial ailicate brick was troduced into this country,

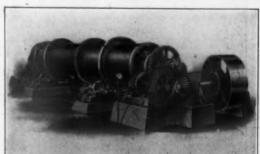
introduced mass this country, mo system has been more succoasful than the so called "Silo" or "Division" method.

In the ratio that the Silo explicitly superior to all other systems hitherto employed, in that proportion the Wiebe-Hydro-Lime-Silicate presents aumarate, to the Division recess is suspendent to the Division superior to the Divisi

ANUFACTURED under the Wiebe Hydro-Lime-Silicate-Process, and by our specially designed machinery, have been acknowledged by leading engineers, architects and organizations of New York City to be the most perfect sand brick in the country. Compression as well as transverse strength, and its non-absorptive qualities far

excel the requirements of the city process and special machinery in this country, a large and profitable field is thrown open to

BY THE INTRODUCTION of our



Hydro-toper Preparation Machine miniates your doubts and work. No mand-lime-brick plant is mplete or successful without this chaine. Receiving the material m the Silo, it prepares and deers same in an absolutely perfect dition for the press.

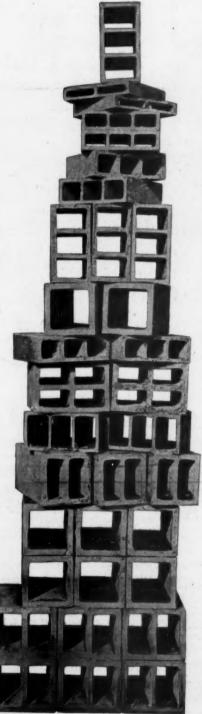
Do you wish to know WHY our rocess is superior to all others? If a have any experience in the coluction of silicate brick, and will low us to show you the merits of ur process, you can easily undersand why, and you will then readily preciate the merits thereof. If you re interested we will gladly enter to any detail processary to demonstrate the convention of the processor of demonstrate or the convention of the processor of demonstrate or the convention of the processor of the

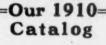
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WIEBE ENGINEERING COMPANY

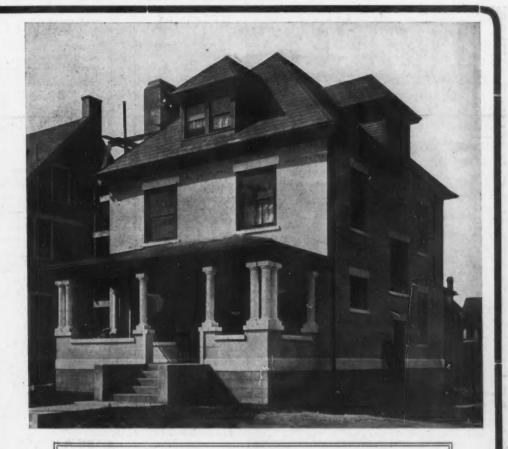
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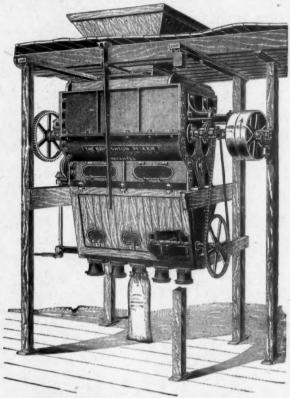
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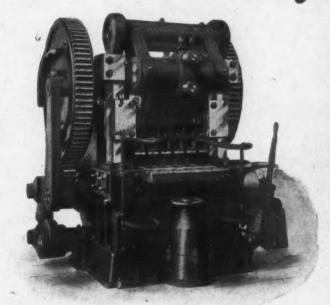
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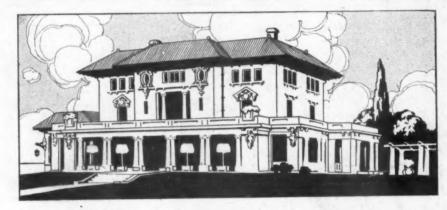


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